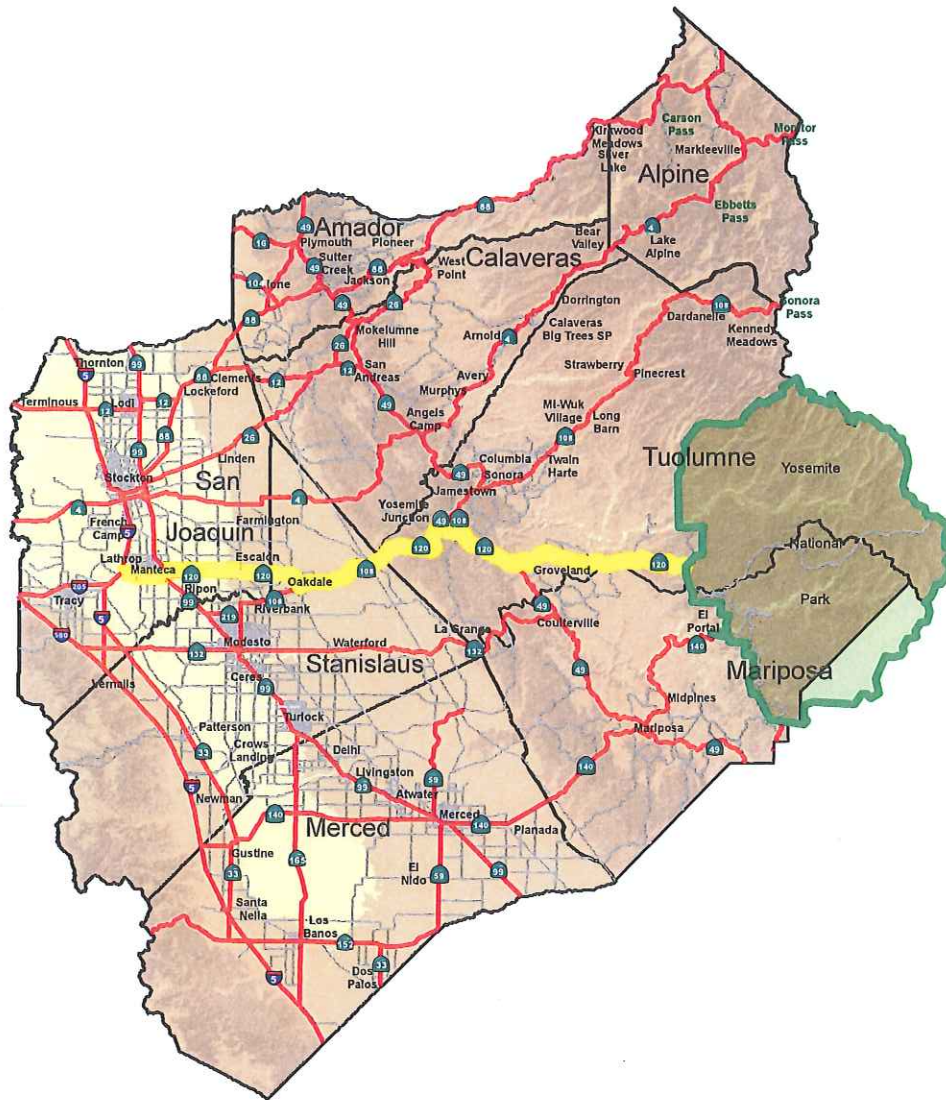




# TRANSPORTATION CONCEPT REPORT STATE ROUTE 120



January 2011

## Caltrans Department of Transportation, District 10 Office of System Planning and Goods Movement

APPROVAL RECOMMENDED:

  
KEN BAXTER, Deputy District Director  
Planning and Local Assistance

  
DATE

  
CARRIE L. BOWEN  
District Director

  
DATE

## Table of Contents

	Page
<b>Executive Summary for SR-120 Corridor in San Joaquin County.....</b>	<b>7</b>
<b>Executive Summary for SR-120 Corridor in Stanislaus County.....</b>	<b>8</b>
<b>Executive Summary for SR-120 Corridor in Tuolumne County.....</b>	<b>9</b>
<b>Executive Summary for SR-120 Corridor in Mariposa County.....</b>	<b>10</b>
<b>Executive Summary.....</b>	<b>11</b>
 <b>Section 1 Introduction.....</b>	 <b>13</b>
1.1 Introduction.....	13
1.2 Purpose of System Planning.....	14
1.3 Transportation Concept Report.....	14
 <b>Section 2 Route Description.....</b>	 <b>15</b>
2.1 TCR Corridor Limits.....	15
2.2 TCR Corridor Width.....	15
2.3 Existing Facility.....	15
2.4 Route Designation.....	16
2.5 Route Functional Classification.....	17
2.6 Existing Route Concept Facility and Rationale.....	19
2.7 TCR Transportation Network.....	20
2.7.1 State Highways, Connecting Routes.....	20
2.7.2 TCR Transportation Network - Transit, Park and Ride, Bikeway Facilities and Passenger Rail.....	20
2.7.2.1 Transit.....	20
2.7.2.2 Park and Ride.....	22
2.7.2.3 Bikeway and Pedestrian Facilities.....	24
2.7.2.4 Passenger Rail.....	27
2.7.2.4.1 Amtrak.....	27
2.7.2.4.2 Altamont Commuter Express.....	27
2.7.2.4.3 High Speed Rail.....	28
2.7.2.4.4 Passenger Rail in Mariposa and Tuolumne Counties.....	29
2.8 Goods Movement.....	29
2.8.1 Trade Corridor.....	30
2.8.2 Port of Stockton.....	30
2.8.3 San Joaquin Valley Short Haul Rail/Inland Port Project.....	31
2.8.4 Freight.....	31
2.8.5 STAA and Truck Parking Issues.....	32
2.8.6 Airport.....	33
2.8.7 Warehousing and Distribution.....	34
2.9 Transportation System Management.....	34
2.9.1 Intelligent Transportation Systems.....	35
2.9.2 Detection.....	42
2.9.3 Transportation Management Centers.....	48
2.9.4 Traffic Control.....	48
2.9.5 Incident Management.....	49
2.9.6 Advanced Traveler Information Systems.....	49
2.10 Transportation Demand Management.....	50

## Table of Contents Continued

	Page
2.10.1 Rideshare Programs.....	50
2.11 Land Use.....	50
2.12 Environmental Scan.....	55
2.12.1 Title VI and Environmental Justice.....	58
2.12.2 Importance of TCRs for Sustaining the Environment.....	59
<b>Section 3 Performance Management and Maintenance Assessment.....</b>	<b>59</b>
3.1 Traffic Volumes.....	60
3.1.1 Truck Volumes.....	62
3.2 Level of Service.....	62
3.2.1 SR-120 Connecting Highways and Corridor Volumes and LOS.....	64
3.3 TCR Concept Facility.....	65
3.3.1 Ultimate Transportation Corridor .....	66
3.4 SR-120 TCR Corridor Programmed and Planned Projects.....	66
3.4.1 Programmed Capacity and Interchange Projects.....	66
3.4.2 Planned Capacity and Interchange Projects.....	67
3.5 Corridor Collision and Incidents.....	69
3.6 Existing Corridor Transportation Management Strategies.....	70
3.6.1 Incident Management.....	70
3.6.2 Transportation Management Plan.....	71
3.6.3 Ramp Metering and HOV Strategies.....	71
3.7 Corridor Rehabilitation and Maintenance Strategy.....	72
3.7.1 Programmed Operational Improvement Projects.....	72
3.7.2 Planned Operational Improvement Projects.....	73
3.7.3 Corridor Maintenance Conditions and Preservation.....	75
3.7.3.1 Pavement Conditions.....	75
3.7.3.2 Bridge Conditions.....	77
3.7.4 Corridor Preservation Management Practices.....	77
3.7.4.1 Right-of-Way, Preservation of Ultimate Transportation Corridor.....	77
3.7.5 Access Control.....	78
3.8 Smart Land Use Management Practices.....	78
3.8.1 2007 San Joaquin Regional Congestion Management Program.....	78
3.8.2 2009 Congestion Management Process for the Stanislaus County Region.....	79
3.8.3 Developer Contributions.....	80
3.8.3.1 San Joaquin County.....	80
3.8.3.2 Stanislaus County.....	81
3.8.3.3 Tuolumne County.....	81
3.8.4 Local Agency Transportation Impact Fees.....	82
3.8.4.1 City of Manteca Public Transportation Facilities Implementation Program Fees.....	82
3.8.4.2 City of Escalon Development Impact Fees.....	83
3.8.4.3 City of Oakdale Development Impact Fees.....	84
3.8.5 Regional Planning and Coordination.....	85
3.8.5.1 North County Corridor.....	85

## Table of Contents Continued

	<b>Page</b>
3.8.5.2 Valley Wide Transit Study.....	86
3.8.5.3 Interregional Transportation Partnership Planning.....	87
3.8.5.4 Valley Wide Regional Blueprint Strategies.....	87
3.8.5.5 Tuolumne County Regional Blueprint.....	87
3.8.5.6 California Partnership for the San Joaquin Valley.....	88
 <b>Section 4 SR-120 Preliminary Performance Management and Maintenance Assessment.....</b>	 <b>88</b>
4.1 SR-120 TCR Transportation System Management Strategies.....	88
4.2 TCR Segment Fact Sheets.....	90
4.3 Key Planning Approaches.....	90
4.3.1 Context Sensitive Solutions.....	90
4.3.2 Safety Conscious Planning.....	91
4.3.3 Complete Streets – Integrating the Transportation System.....	91

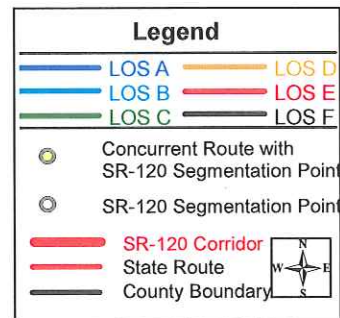


## TABLES AND FIGURES

	<b>Page</b>
Table 2.5: Corridor Designation and Functional Classification.....	17
Table 2.7.2.2a: Existing Park and Ride Facilities.....	23
Table 2.7.2.2b: Planned Park and Ride Facilities.....	23
Table 2.7.2.3a: SR-120 Existing Bike and Pedestrian Facilities (Crossing SR-120).....	24
Table 2.7.2.3b: SR-120 Planned Bike and Pedestrian Facilities (Crossing SR-120).....	25
Table 2.7.2.3c: Existing Bike and Pedestrian Facilities Connecting or Part of SR-120.....	26
Table 2.7.2.3d: Planned Bike and Pedestrian Facilities Connecting or Part of SR-120.....	26
Figure 2.7.2.4.2: Ace Map.....	27
Figure 2.7.2.4.3: High Speed Rail.....	29
Figure 2.8.4: Sierra Railroad.....	31
Table 2.8.5: Truck Network.....	32
Table 2.9.1a: Existing ITS Elements.....	37
Table 2.9.1b: Programmed ITS Elements.....	40
Table 2.9.1c: Planned ITS Elements.....	41
Table 2.9.2a: Existing Detection.....	42
Table 2.9.2b: Programmed Detection.....	44
Table 2.9.2c: Planned Detection.....	45
Figure 2.9: ITS Elements on SR-120.....	47
Table 2.11: Developments Adjacent to SR-120.....	51
Figure 2.11.: Land Use Map.....	54
Table 2.12: Environmental Scan.....	56
Table 3.1: Traffic Volumes.....	60
Table 3.2: LOS, Concept Facility, and UTC.....	62
Table 3.2.1: SR-120 Connecting State Highway Volumes and LOS.....	64
Table 3.4.1: Programmed Capacity and Interchange Projects.....	67
Table 3.4.2: Planned Capacity and Interchange Projects.....	68
Table 3.5: Corridor Collision and Incidents.....	69
Table 3.7.1: Programmed Operational Improvement Project List.....	73
Table 3.7.2: Planned Operational Improvement Project List.....	74
Table 3.7.3.1: Existing Corridor Pavement Distress.....	75
Table 3.7.3.2: SR-120 Corridor Bridge Needs.....	77
Table 3.8.3.1: San Joaquin County Regional Transportation Impact Fee Structure.....	80
Table 3.8.3.3: Tuolumne County Traffic Mitigation Fees.....	82
Table 3.8.4.2: City of Escalon Development Impact Fees.....	83
Table 3.8.4.3: City of Oakdale Development Impact Fees.....	84
Figure 3.8.5.1: North County Corridor – Corridor B Alternative.....	85

## **APPENDIX**

APPENDIX A:	Level of Service Definitions
APPENDIX B:	Glossary of Terms
APPENDIX C:	Rural, Urban and Urbanized Definitions
APPENDIX D:	Environmental Information
APPENDIX E-1 TO E-6:	San Joaquin County Segmentation Fact Sheets
APPENDIX F-1 TO F-7:	Stanislaus County Segmentation Fact Sheets
APPENDIX G-1 TO G-10:	Tuolumne County Segmentation Fact Sheets (APPENDIX G-9 is Mariposa County Segmentation Fact Sheet)
APPENDIX H-1	Mariposa County Segmentation Fact Sheet (repeat)



SAN JOAQUIN COUNTY  
SR-120 TCR  
EXISTING AND FUTURE CONDITIONS  
EXECUTIVE SUMMARY

Traffic Volumes												
Segment	Post Mile	Description	2007 AADT	2015 AADT	2030 AADT	2007 Peak Hour Volume	2015 Peak Hour Volume	2030 Peak Hour Volume	Truck Volume (2007)	5+ Axle Truck Volume (2007)	Truck Volume Peak Hour %	Truck Volume % of Total ADT
San Joaquin County												
1	00.00/T6.872	Junction I-5 to SR-99	67,800	78,600	106,000	5,400	7,450	10,100	9,200	2,300	11.0	14.0
2	R6.2-T6.83	Junction SR-99 S. to Austin Rd.	16,400	19,000	23,900	1,600	1,920	2,410	2,400	2,300	11.0	15.0
3	T6.83-11.64	Austin Rd. To French Camp Rd.	11,800	13,700	17,200	1,300	1,790	2,440	2,400	1,500	11.0	14.0
4	11.64-15.86	French Camp Rd. to Brennan Rd.	12,400	15,400	21,000	1,400	1,930	2,630	2,400	1,500	9.0	12.0
5	15.86-18.69	Brennan Rd. to Harrold Ave. in Escalon	12,500	15,500	21,100	1,300	1,790	2,440	2,400	1,500	8.0	11.0
6	18.69-21.18	Harrold Ave. in Escalon to Stanislaus County Line	12,100	15,000	20,400	1,500	2,070	2,820	2,400	1,500	8.0	10.0

Segment	SR-120 Post Mile	Description	Existing Facility	LOS (2007) Existing Facility	LOS w/ Existing Facility (2015)	LOS w/ Existing Facility (2030)	Rural Urban	Concept LOS	CT Concept Facility*	Ultimate Transportation Corridor*
San Joaquin County										
1	00.00/T6.872	Junction I-5 to SR-99	4F	E	F	F	U	D	6F	8F
2	R6.2-T6.83	Junction SR-99 S. to Austin Rd.	4C	B	B	C	U	D	4C	4C
3	T6.83-11.64	Austin Rd. To French Camp Rd.	2C	D	E	E	R	C	4C	4C
4	11.64-15.86	French Camp Rd. to Brennan Rd.	2C	D	E	F	R	C	4C	4C
5	15.86-18.69	Brennan Rd. to Harrold Ave. in Escalon	2C	D	D	E	U	D	4C**	4C**
6	18.69-21.18	Harrold Ave. in Escalon to Stanislaus County Line	2C	D	E	F	R	C	4C	4C

For Segment 1, the concept facility includes consideration of ramp metering and HOV lanes during the final build out of the facility to manage freeway performance. For Segments 2-6, a four-lane conventional highway or expressway needed to meet Concept LOS "C" in rural and "D" in urban areas. Orange shading indicates it does not meet concept LOS. For rural two lane highways with lower ADT, special emphasis should be placed on identifying lower cost improvements such as truck climbing and passing lanes, and channelization in lieu of recommending an expressway.

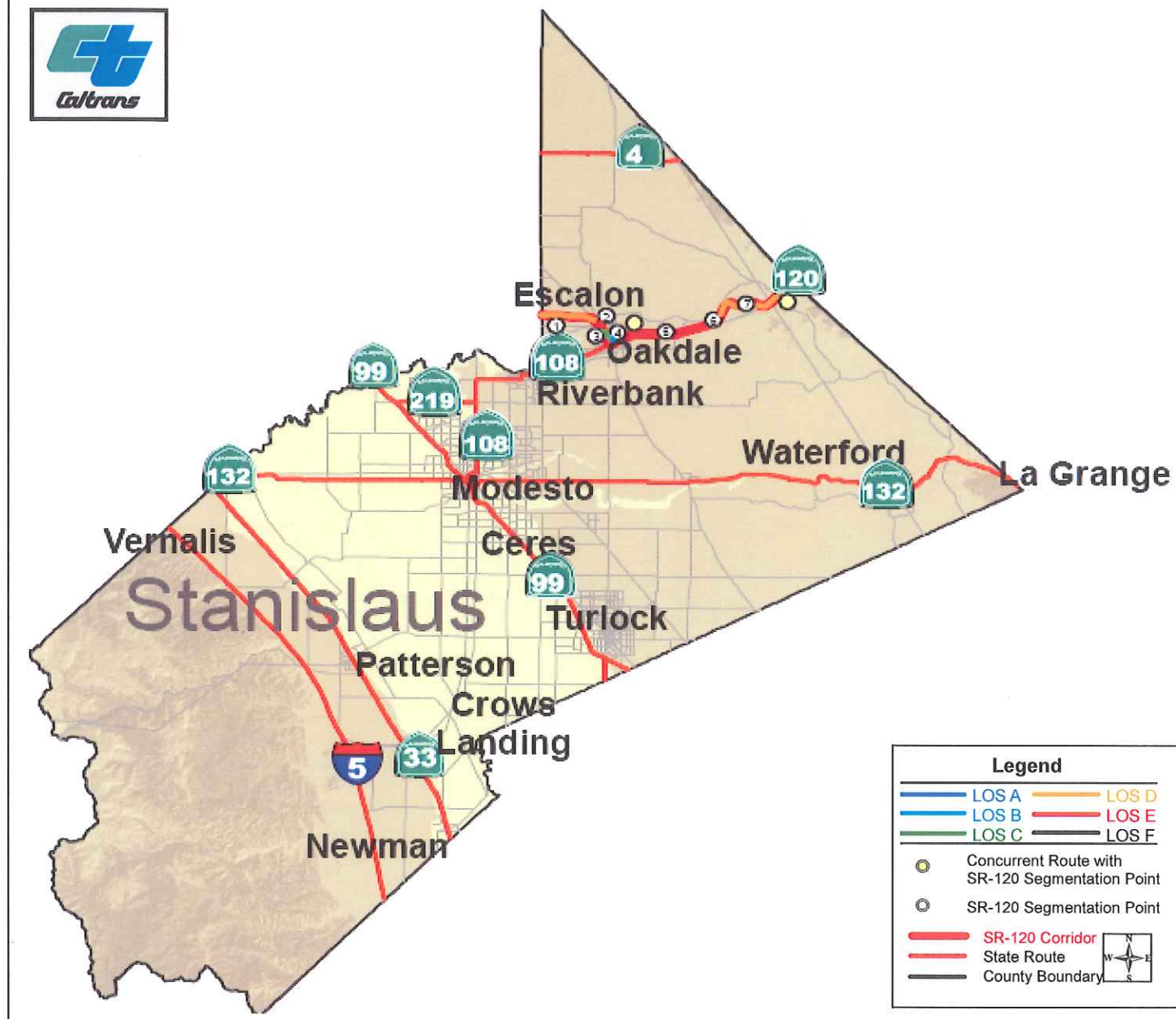
\*E = Expressway

F = Freeway

C = Conventional Highway

\*\*Although conditions require widening, due to land use and environmental constraints, the City of Escalon will be preserving this portion of the corridor to the existing facility.





# STANISLAUS COUNTY SR-120 TCR EXISTING AND FUTURE CONDITIONS EXECUTIVE SUMMARY

Segment	SR-120 Post Mile	Description	2007 AADT	2015 AADT	2030 AADT	2007 Peak Hour Volume	2015 Peak Hour Volume	2030 Peak Hour Volume	Truck Volume (2007)	5+ Axle Truck Volume (2007)	Truck Volume Peak Hour %	Truck Volume % of Total ADT
1	0.00-3.46	San Joaquin County Line to Valley Home Rd.	12,837	15,772	21,241	1,587	2,006	2,622	1,173	704	15.0	9.0
2	3.46-4.26	Valley Home Rd. to Stanislaus River	20,600	23,900	30,100	2,500	3,125	3,905	3,000	1,800	11.0	15.0
3	4.26-5.12	Stanislaus River to Jct. SR-108	20,700	25,700	35,000	2,500	3,100	4,200	2,700	1,700	10.0	13.0
4	5.12-6.04	SR-108 to Maag	22,600	28,000	38,200	2,300	2,785	3,750	1,600	1,020	5.0	7.0
5	6.04-10.11	Maag to 0.87 mi. E. of Wamble Rd..	17,203	21,312	29,052	1,877	2,246	3,085	1,600	669	7.0	9.0
6	10.11-11.63	Orange Blossom Rd. to 0.2 miles E. of Lancaster Rd.	12,700	15,700	21,500	1,600	1,900	2,600	1,600	600	8.0	10.0
7	11.63-T18.16	Approx. 0.2 mi. E. of Lancaster Rd. to Tuolumne County Line	12,461	14,684	19,410	1,660	2,079	2,779	1,660	481	8.0	11.0

Segment	SR-120 Post Mile	Description	Existing Facility*	LOS (2007) Existing Facility	LOS w/ Existing Facility (2015)	LOS w/ Existing Facility (2030)	Rural Urban	Concept LOS	CT Concept Facility*	Ultimate Transportation Corridor*
Stanislaus County										
1	0.00-3.46	San Joaquin County Line to Valley Home Rd.	2E	D	E	E	R	C	2E	4E
2	3.46-4.26	Valley Home Rd. to Stanislaus River	2C	E	F	F	R	C	2C	4C
3	4.26-5.12	Stanislaus River to Jct. SR-108	4C	C	C	D	U	D	4C	4C
4	5.12-6.04	SR-108 to Maag	4C	B	C	D	U	D	4C	4C
5	6.04-10.11	Maag to 0.87 mi. E. of Wamble Rd.	2C	E	E	F	U	D	4C or North County Corridor (NCC)	4C or North County Corridor (NCC)
6	10.11-11.63	0.87 mi. E. of Wamble Rd. to 0.2 mi. E. of Lancaster Rd.	2E	D	D	F	R	C	4E or NCC	4E or NCC
7	11.63-T18.16	0.2 mi. E. of Lancaster Rd. to Tuolumne County Line	2C	D	E	F	R	C	2C	4C

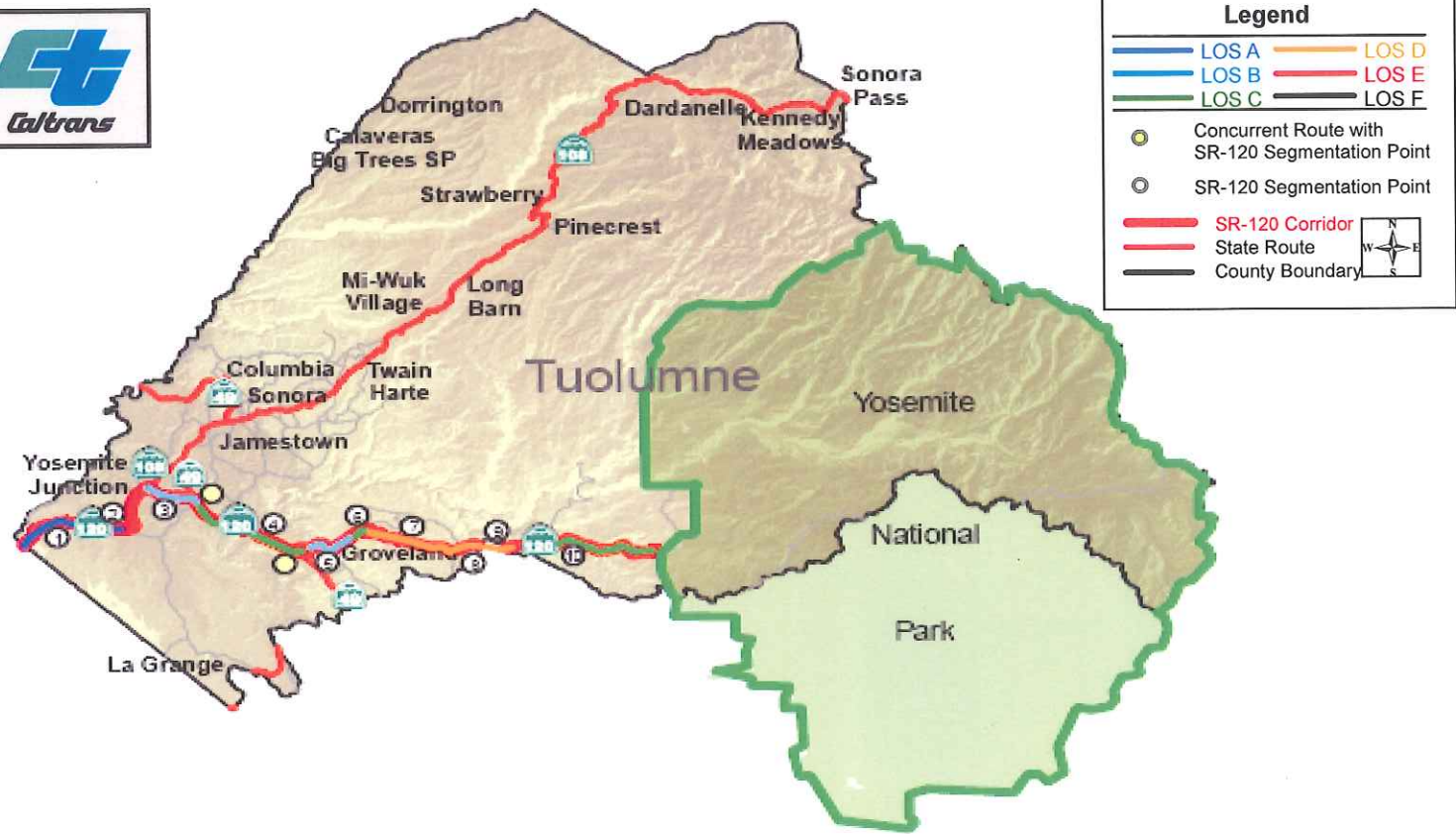
Four-lane conventional highway or expressway needed to meet Concept LOS "C" in rural and LOS "D" in urban areas. Orange shading indicates it does not meet concept LOS. For rural two lane highways with lower ADT, special emphasis should be placed on identifying lower cost improvements such as truck climbing and passing lanes, and channelization in lieu of recommending an expressway.

\*E = Expressway

F = Freeway

C = Conventional Highway





TUOLUMNE COUNTY  
SR-120 TCR  
EXISTING AND FUTURE CONDITIONS  
EXECUTIVE SUMMARY

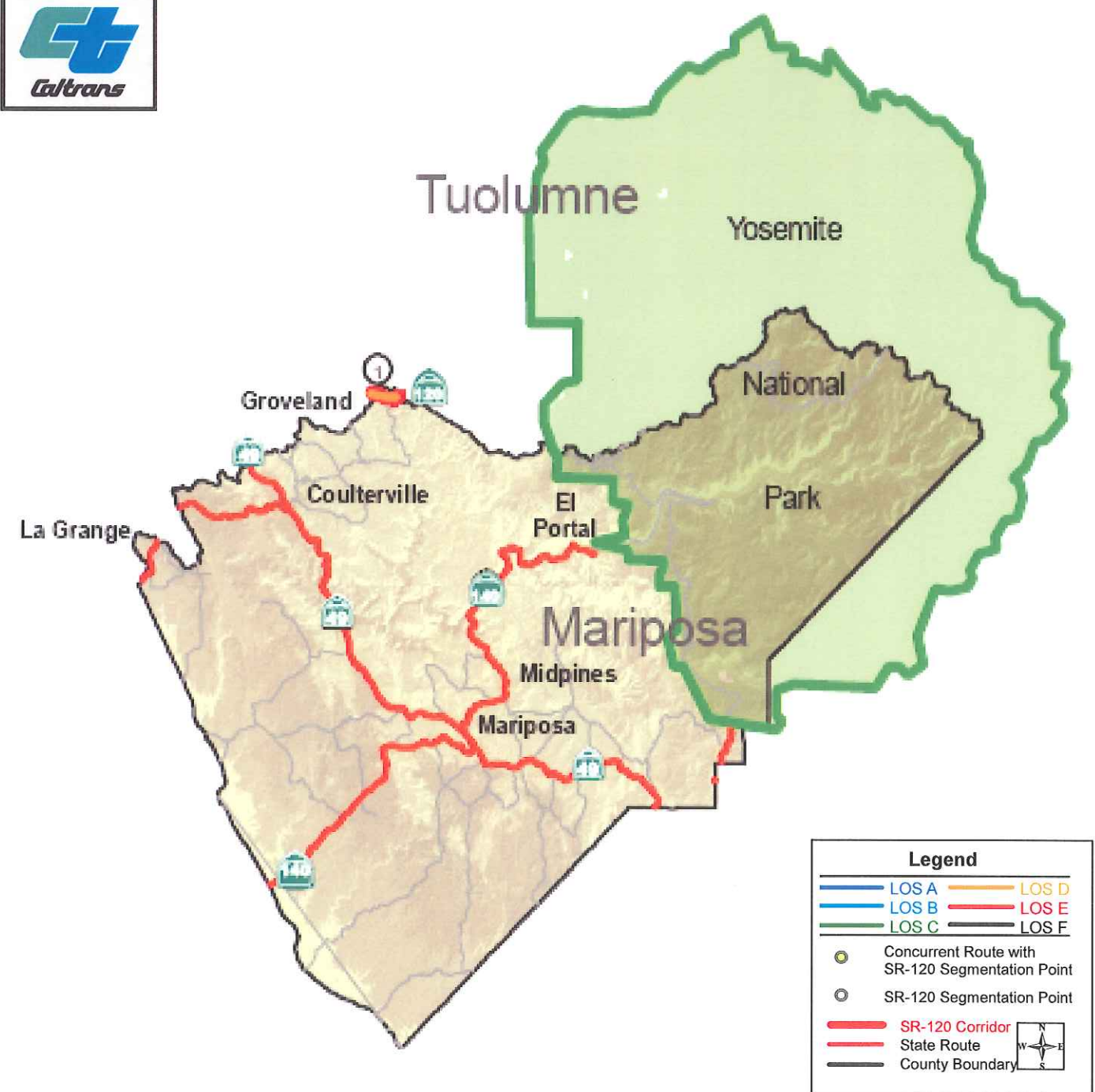
Segment	SR-120 Post Mile	Description	2007AADT	2015 AADT	2030 AADT	2007 Peak Hour Volume	2015 Peak Hour Volume	2030 Peak Hour Volume	Truck Volume (2007)	5+ Axle Truck Volume (2007)	Truck Volume Peak Hour %	Truck Volume % of Total ADT
Tuolumne County												
1	R0.00-T6.96	From Stanislaus County Line to 0.25 mi. W. of Green Springs Rd. to Yosemite Junction	13,300	15,400	19,400	2,000	2,300	2,800	1,700	400	8.0	11.0
2	T6.96-12.07	From 0.25 mi. west of Green Springs Rd. to Yosemite Junction	16,100	18,600	23,500	2,200	2,500	3,100	1,700	400	8.0	10.0
3	12.07-15.52	E. Jct. SR-108 to Montezuma Rd., N. Jct, SR-49	3,000	3,400	4,380	500	600	700	260	100	5.0	7.0
4	15.52-23.90	Montezuma Rd. N. Jct. SR-49 to S. Jct. SR-49	4,700	5,500	6,900	670	780	1,070	250	100	4.0	6.0
5	23.90-30.32	S. Jct. SR-49 to Wards Ferry Rd./Big Oaks Rd.	5,000	5,900	7,250	630	720	900	200	60	4.0	5.0
6	30.32-32.55	Wards Ferry/Big Oaks Rd. to Ferretti Rd. in Groveland	6,600	7,700	9,600	900	1,100	1,300	200	85	2.0	3.0
7	32.55-38.90	Ferretti Rd. in Groveland to Hells Hollow Rd.	4,600	5,300	6,700	1,200	1,400	1,700	200	85	3.0	4.0
8	R38.90-R41.52	Hells Hollow Rd. to Mariposa County Line	3,800	4,400	5,500	1,100	1,300	1,600	200	85	3.0	4.0
9	R41.52-R43.75	Tuolumne County Line to Tuolumne County Line	3,700	4,300	5,400	1,100	1,300	1,600	200	85	3.0	4.0
10	R43.75-R56.51	Mariposa County Line to Yosemite National Park	3,500	4,100	5,100	1,000	1,200	1,500	200	85	2.0	3.0

Segment	SR-120 Post Mile	Description	Existing Facility	LOS (2007) Existing Facility	LOS w/ Existing Facility (2015)	LOS w/ Existing Facility (2030)	Rural Urban	CT Concept LOS	CT Concept Facility*	Ultimate Transportation Corridor*
Tuolumne County										
1	R0.00-T6.96	From Stanislaus County Line to 0.25 mi. W. of Green Springs Rd. to Yosemite Junction	4E	A	A	A	R	C	4E	4E
2	T6.96-12.07	From 0.25 mi. west of Green Springs Rd. to Yosemite Junction	2E	E	F	F	R	C	4E	4E
3	12.07-15.52	E. Jct. SR-108 to Montezuma Rd., N. Jct, SR-49	2C	B	B	C	R	C	2C	2C
4	15.52-23.90	Montezuma Rd. N. Jct. SR-49 to S. Jct. SR-49	2E	C	C	C	R	C	2E	2E
5	23.90-30.32	S. Jct. SR-49 to Wards Ferry Rd./Big Oaks Rd.	2C	B	C	C	R	C	2C	2C
6	30.32-32.55	Wards Ferry/Big Oaks Rd. to Ferretti Rd. in Groveland	2C	C	D	D	R	C	2C	4C
7	32.55-R38.90	Ferretti Rd. in Groveland to Hells Hollow Rd.	2C	D	D	E	R	C	2C	4C
8	R38.90-R41.52	Hells Hollow Rd. to Mariposa County Line	2E	D	D	D	R	C	2E	4E
9	R41.52-R43.75	Tuolumne County Line to Tuolumne County Line	2E	D	D	E	R	C	2E	4E
10	R43.75-R56.51	Mariposa County Line to Yosemite National Park	2E	C	D	D	R	C	2E	4E

Four-lane conventional highway or expressway needed to meet Concept LOS “C”. Orange shading indicates it does not meet concept LOS. For rural two lane highways with lower ADT, special emphasis should be placed on identifying lower cost improvements such as left turn lanes, intersection improvements, truck climbing and passing lanes, and channelization as appropriate in lieu of recommending an expressway.

\*E = Expressway  
C = Conventional Highway





MARIPOSA COUNTY  
SR-120 TCR  
EXISTING AND FUTURE CONDITIONS  
EXECUTIVE SUMMARY

Segment	SR-120 Post Mile	Description	2007AADT	2015 AADT	2030 AADT	2007 Peak Hour Volume	2015 Peak Hour Volume	2030 Peak Hour Volume	Truck Volume (2007)	5+ Axle Truck Volume (2007)	Truck Volume Peak Hour %	Truck Volume % of Total ADT
Mariposa County												
1	R41.52-R43.75	Tuolumne County Line to Tuolumne County Line	3,700	4,300	5,400	1,100	1,300	1,600	200	85	3.0	4.0

Segment	SR-120 Post Mile	Description	Existing Facility	LOS (2007) Existing Facility	LOS w/ Existing Facility (2015)	LOS w/ Existing Facility (2030)	Rural Urban	Concept LOS	CT Concept Facility	Ultimate Transportation Corridor
1	R41.52-R43.75	Tuolumne County Line to Tuolumne County Line	2E	D	D	E	R	C	2E	4E

Four-lane conventional highway or expressway needed to meet Concept LOS "C". Orange shading indicates it does not meet concept LOS. For rural two lane highways with lower ADT, special emphasis should be placed on identifying lower cost improvements such as left turn lanes, intersection improvements, truck climbing and passing lanes, and channelization as appropriate in lieu of recommending an expressway.



## **State Route 120 Transportation Concept Report (TCR)**

### **Executive Summary**

The purpose of a Transportation Concept Report (TCR) is to determine the concept facility improvements and Ultimate Transportation Corridor (UTC) improvements needed for the future of the corridor so that right-of-way can be preserved along the corridor's length to ensure the safety of the public in using the highway. The facility improvements that are needed to maintain the concept Level of Service (LOS) of "C" or better in rural areas and "D" or better in urban areas is the standard that is used.

In Section 1.2, the purpose of System Planning is explained. Section 1.3 explains the purpose of a TCR. In Section 2, a route description is discussed for the route including an inventory of the transportation network. In Section 3, a Performance Management and Maintenance Assessment is conducted and an analysis of the traffic volumes including truck volumes, concept LOS, LOS conditions, concept facility types, and UTC plans are discussed. Section 4 discusses the SR-120 Transportation System Management (TSM) strategies planned for the corridor.

State Route 120 (SR-120) is a high volume east/west four-lane freeway between Interstate 5 (I-5) and SR-99 and serves local traffic in Manteca. East of SR-99, it continues as a two-lane conventional highway through eastern Manteca and continues through Escalon and Oakdale where it becomes more rural in nature. In Tuolumne County, it passes through the town of Groveland and continues where it ends finally at the boundary with Yosemite National Park. State Route 120 serves as a commuter route and is a primary recreational route for tourists visiting Yosemite National Park from the Bay Area, northern California and the San Joaquin Valley. The highway crosses through San Joaquin and Stanislaus counties on flat terrain and changes to rolling to mountainous terrain through Tuolumne and Mariposa counties. The route is on the Interregional Road System which makes it eligible for Interregional Improvement Program funding.

In San Joaquin County, traffic volumes are the highest from the junction of I-5 to SR-99. The existing facility is a four-lane freeway. The concept LOS needed is "D." The LOS in 2007 is "E," by 2015 it will degrade to "F." The concept facility is a six-lane freeway. The Regional Transportation Plan (RTP) plans for a six-lane freeway to begin construction in 2025 to widen in the inside shoulders at a projected cost of \$90,600,000. By 2030 the UTC needed will be an 8-lane freeway. No additional projects are planned to date.

From Austin Road to Brennan Road, the existing facility is a two-lane rural conventional highway. The concept LOS is required to be LOS "C." The LOS in 2007 was determined to be "D." In 2015, the LOS degrades to "E." The concept facility needed is a four-lane conventional highway. There is a five lane project in the San Joaquin RTP to address this need. The project is from Jack Tone Road to Sexton and McHenry Road. There is a gap found between Austin Road and Jack Tone Road and another gap between Sexton Road and Brennan Road. There are no project plans beyond that point to address UTC needs. Although there has been found a need for a four lane conventional highway through the City of Escalon on SR-120, the City has

indicated that they plan to keep SR-120 as a two lane conventional highway indefinitely through the city limits. In the portion from SR-99 to Austin Road the accident rate was 1.91 versus 1.48 for the statewide average rate. It is recommended that operational improvements and addressing access management issues should be considered for this location.

From Harrold Avenue to the Stanislaus County Line, the existing facility is a two-lane conventional highway. The concept LOS needed is "C." The LOS in 2007 was "D" and in 2015 degrades to be "E." The concept facility needed is a four-lane conventional highway. There is a planned but unfunded potential project in the RTP east of Escalon to widen to a five-lane conventional highway from McHenry to Harrold Avenue or to the Stanislaus County Line. This portion of highway meets the concept LOS until 2030, and appears to not need improvements. The portion that needs improvements is from Harrold Avenue to the Stanislaus County Line. The concept LOS is "C" and the LOS in 2007 is "D." The LOS in 2015 is "E." In this portion, there is a gap where improvements are needed between Harrold Avenue and the Stanislaus County Line. The concept facility and UTC is a four-lane conventional highway.

In Stanislaus County, traffic volumes are the highest in the City of Oakdale at the junction of SR-108 and SR-120 to Maag Road. From the San Joaquin County Line to the Stanislaus River the existing facility is a two-lane expressway. The concept LOS is "C." From the San Joaquin County Line to Valley Home Road, the LOS in 2007 was "D," and will be "E" in 2015. For the portion between Valley Home Road and Stanislaus River, the LOS in 2007 was "E" and degrades in 2015 to "F." However, there are no capacity increasing projects planned for this section of highway.

From Maag Road to 0.87 miles east of Wamble Road, the existing facility is a two-lane conventional highway. The concept LOS needed is "D." The 2007 LOS was found to be "E," and for 2015 will continue to be at LOS "E." A four-lane conventional highway would be needed between 0.87 miles east of Wamble Road to 0.2 miles east of Lancaster Road. The existing facility is a two-lane expressway. The concept LOS needs to be "C." The 2007 LOS was found to be "D" and remains at "D" for 2015. By 2030, the LOS degrades to "F." A four-lane expressway would be needed.

Traffic on SR-120 through the City of Oakdale is a combination of commuter, local commerce, and goods movement, with a large component of recreational traffic. This traffic currently conflicts with local traffic on the existing facilities, creating congestion and safety concerns, as well as, elevated noise and air pollution levels. These conditions are expected to worsen significantly over time as development continues and traffic increases within the corridor. To manage for congestion within the City of Oakdale, the North County Corridor (NCC) is planned for interregional traffic to bypass the City of Oakdale. In Stanislaus County, the collision rates are found to exceed the statewide average significantly through the portion that will be replaced with the NCC, between Valley Home Road and Maag Road if built. It will provide 25 miles of roadway on a new alignment.

In Tuolumne County, the LOS for 2007, between 0.25 miles west of Green Springs Road to Yosemite Junction, was "E." Tuolumne County being rural in nature for the entire corridor portion has a concept LOS of "C." The concept facility needed between the Stanislaus County

Line and Yosemite Junction is a four-lane expressway. The UTC is also planned to be a four-lane expressway due to environmental and funding constraints. The portion between the Stanislaus County Line and 0.25 mile west of Green Springs Road is already a four-lane expressway leaving the only portion in that vicinity in the near future needing improvements to be between 0.25 miles west of Green Springs Road to Yosemite Junction. There are plans (unfunded) to create a four-lane expressway adding from the existing four-lane section which may address or partially address this gap. The RTP describes plans for the transportation project to be built by 2030.

Between Wards Ferry Road/Big Oaks Road to Ferretti Road in Groveland, there are plans in the Tuolumne County RTP to construct a new two-four lane expressway from Wards Ferry Road to Ferretti Road in Groveland. The 2015 LOS is “D,” the concept LOS is “C.”

Between Ferretti Road and the Mariposa County Line, the 2007 and 2015 LOS is “D,” and the concept LOS is “C.” There are no projects planned in the Tuolumne RTP for this section of highway.

For Mariposa County, the concept LOS is “C” however the LOS conditions are “D” in 2007, and “D” in 2015.

There is significant growth expected on the western portion of the corridor. There are limited planned transportation projects on the corridor to address these deficiencies. In San Joaquin County, there are plans to widen the freeway portion of SR-120 between I-5 and SR-99 from four to six lanes. The *Northern San Joaquin Valley Regional Ramp Metering and High Occupancy Vehicle Master Plan* identifies ramp metering and HOV lanes to be effective and suggests the 2030 date for implementation for the portion of SR-120 between I-5 and SR-99. The NCC is a project in Stanislaus County that will serve to address deficiencies and improve traffic congestion along SR-120 through Oakdale.

The environmental scan of the corridor shows that potential impacts to cultural resources in San Joaquin and Stanislaus County are moderate to high, and Tuolumne and Mariposa County are high as well, potentially affecting right-of-way acquisition when improvements are needed.

## **Section 1 Introduction**

### **1.1 Introduction**

System Planning is the California Department of Transportation’s (Caltrans) long-range (20 years) transportation planning process and is conducted pursuant to Government Code Section 65086(a) and Caltrans policy. The multi-jurisdictional system planning process is multi-modal and considers the entire transportation network, including rail, air, ferries, mass transit, State highways, and local streets and roads and non-motorized modes (i.e. bike, pedestrian etc.). System Planning is used to identify and prioritize future transportation improvements in cooperation with its planning partners. As part of the continuing, cooperative, and comprehensive transportation planning process, System Planning strives for interregional and statewide continuity of the State’s transportation network.

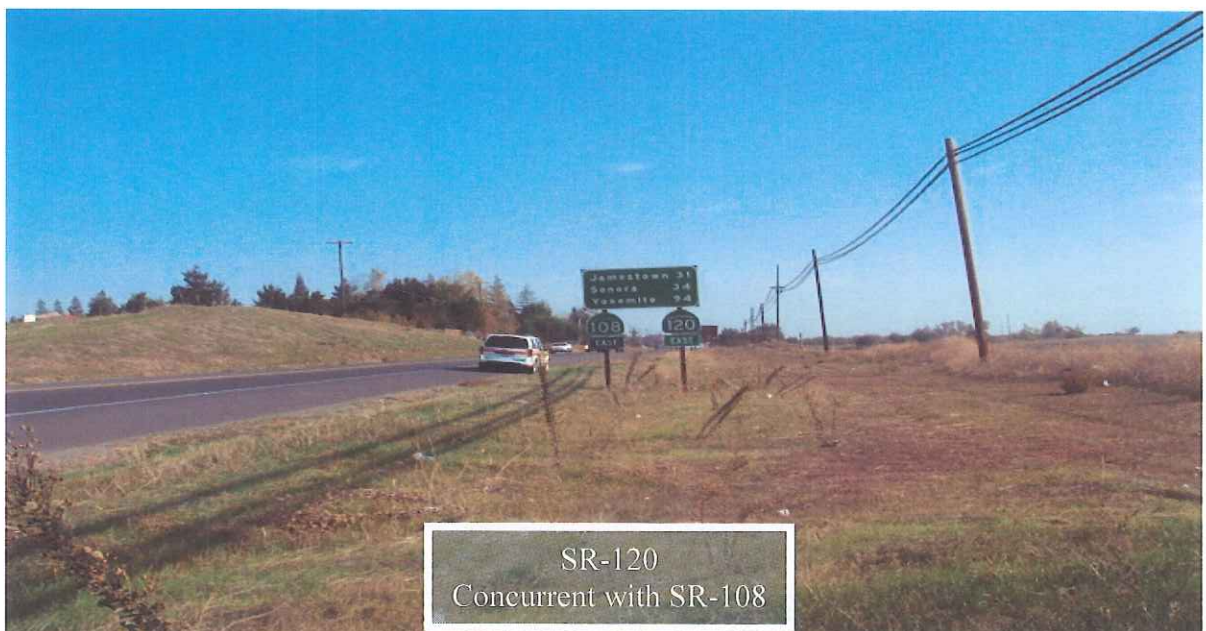
## 1.2 Purpose of System Planning

System Planning evaluates current and future operating conditions and deficiencies on the State transportation system. All System Planning activities are conducted in an open environment where input is actively solicited from the local agencies involved with guiding and approving local development. Our objective is to come to an early consensus with our external partners regarding the capacity of the State Highway System (SHS) facilities needed to accommodate local growth and interregional transportation. Caltrans and the local agencies can then work together to ensure transportation improvements accompany growth and ensure continued mobility for all Californians.

System Planning produces four interrelated planning documents. These documents include the District System Management Plan (DSMP), the Transportation System Development Program (TSDP), TCR, and the Corridor System Management Plan (CSMP). These documents provide guidance, evaluate transportation corridors, and develop system improvements. The document presented here is the Transportation Concept Report for State Route 120 (SR-120).

## 1.4 Transportation Concept Report

The TCR is a system planning document and tool that includes an analysis of a transportation corridor. The TCR establishes the future concept of LOS for segments along the route and broadly identifies the nature and extent of the improvements needed to attain that LOS. Operating conditions for each corridor are projected for 10-year and 20-year horizons. Beyond the 20-year planning period, the TCR identifies the UTC to ensure that adequate right-of-way is preserved for future ultimate facility projects. While the 10-year and 20-year plans consider funding issues, the UTC does not.



## **Section 2    Route Description**

State Route 120 begins at I-5 in Caltrans District 10 in San Joaquin County and ends at Yosemite National Park, where it has a route break. State Route 120 crosses through San Joaquin, Stanislaus, Tuolumne and Mariposa Counties. Beyond the District boundaries, it crosses through Yosemite National Park under the jurisdiction of the National Park Service and becomes a park service road, and continues into Caltrans District 9 jurisdiction where it begins again as SR-120, and ends at its junction with U.S. Route 6, in Mono County, near the Nevada State Line.

The corridor provides a convenient east/west linkage for commuter and recreational traffic between the San Francisco Bay Area and the Sierra Nevada Mountains. However, SR-120 faces many challenges now, and in the years ahead. Due to the low cost of housing in the San Joaquin Valley and the adjacent foothills, traffic loads from SR-120 onto I-205 to I-580 into the Bay Area where higher paying jobs can be found. This causes higher Annual Average Daily Traffic (AADT) and truck traffic, encroaching development, and lack of adequate transportation funding.

### **2.1    TCR Corridor Limits**

This TCR begins at I-5 in San Joaquin County and ends at the beginning of National Park Service land at postmile R56.51. The TCR corridor is 96.5 miles in length traversing through the cities of Lathrop, Manteca, Escalon, Oakdale and Groveland. Caltrans District 9 has completed a TCR of SR-120 in May 2006, and for consistency, TCR efforts have been coordinated across jurisdictional boundaries.

### **2.2    TCR Corridor Width**

In further defining the TCR corridor, all parallel facilities within an approximately one-mile parameter of SR-120 and all modes of transportation serving SR-120 will be included. However, in the rural areas other roads not within the one-mile parameter will be considered since actual parallel routes within the one-mile parameter in these rural areas would be rare but could serve the same purpose by the definition of a parallel route. Multi-modal considerations include: transit lines which run primarily through the urbanized portions of the TCR corridor, five park and ride lots along the corridor, the Stockton Metropolitan Airport, as well as other major inter-modal facilities are in close proximity within San Joaquin County. SR-120 connects with I-5 and SR-99 in Manteca to serve as the major connector to I-205/I-580 to the San Francisco/San Jose/Bay Area region with additional connections via SR-108 in Stanislaus and Tuolumne Counties and via SR-49 through the Sierra Nevada Mountains. A description of the land uses located within the SR-120 corridor and development projects impacting the TCR corridor are provided in Section 2.11 on pages 50-53.

### **2.3    Existing Facility**

Within the TCR corridor, the facility type on SR-120 is a:

### **San Joaquin County**

- Four-lane freeway from I-5 to SR-99.
- Two-lane conventional highway with a continuous left turn lane from SR-99 to Austin Road.
- Two-lane conventional highway with left turn lanes from Austin Road to the Stanislaus County Line.

### **Stanislaus County**

- Two-lane expressway from the Stanislaus County Line to Valley Home Road.
- Two-lane conventional highway with left turn lanes from Valley Home Road to the Stanislaus River.
- Two-lane conventional highway with left turn/passing lanes from the Stanislaus River to the junction with SR-108.
- Four-lane conventional highway with left turn lanes from SR-108 to Maag Avenue.
- Two-lane conventional highway with left turn/passing lanes from Maag Avenue to the Tuolumne County Line.

### **Tuolumne County**

- Two-lane expressway to Green Springs Road from the Tuolumne County Line.
- Two-lane expressway with left turn lanes from Green Springs Road to East junction of SR-108.
- Two-lane conventional highway from East Junction SR-108 to South Jct. SR-49.
- Two-lane conventional highway with turnouts from South Junction SR-49 to Wards Ferry/Big Oak Road.
- Two-lane conventional highway from Wards Ferry/Big Oak Road to Hells Hollow Road.
- Two-lane expressway from Hells Hollow Road to Yosemite National Park.

## **2.4 Route Designation**

State Route 120 is functionally classified as a Principal Arterial between I-5 and SR-99 and as an Other Principal Arterial for the remainder of the route. It is in the Interregional Road System (IRRS) classification making it eligible of Interregional Improvement Program (IIP) funding as part of the State's 25 percent share of the State Transportation Improvement Program (STIP) funds. It is a High Emphasis route but not a Focus route in the IRRS. The inclusion of the highway in the High Emphasis category highlights its critical importance to interregional travel and the state as a whole. It is included in the California Freeway/Expressway System.

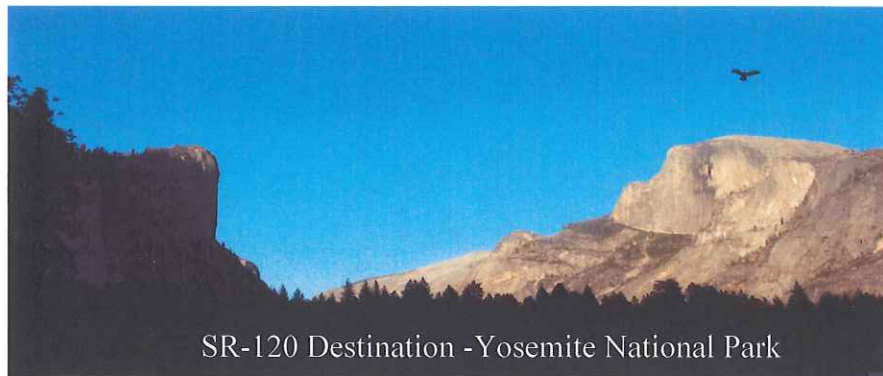
It is a part of the State Network for State Transportation Assistance Act (STAA) Terminal Access route system to south junction SR-49 (PM 23.9) and from there is a California Legal



Advisory Route posted as advisory for vehicles with a kingpin-to-rear-axle length of over 30 feet to the TCR route break at the border with Yosemite National Park where the State Route ends.

State Route 120 is part of the National Highway System (NHS). It is not a part of the Strategic Highway Network (STRAHNET). It is accessible to bicycles from east of SR-99 to its border with Yosemite National Park, and continues as accessible to bicycles beyond the TCR corridor limits into Yosemite National Park.

Refer to Table 2.5 for additional information on SR-120 corridor designation.



## 2.5 Route Functional Classification

The Federal Highway Administration (FHWA) identifies functional classification as a key item in transportation data. Streets and highways are grouped into classes according to the service they provide and this is used in determining Federal funding to maintain the roads. There are three highway functional classifications: arterial, collector, and local roads. All streets and highways are grouped into one of these classes, depending on the character of the traffic (i.e., local or long distance) and the degree of land access that they allow. Table 2.5 identifies the corridor designation and functional classification of SR-120 through the TCR corridor limits.

**Table 2.5: Corridor Designation and Functional Classification**

Post Mile	Description	Functional Classification	Rural/ Urban	NHS (Y/N)	FWY/ EXPW System (Y/N)	STRAH- NET (Y/N)	IRRS (Yes: HE, F, G) or No	STAA (NTN/ TA) or No	Scenic (Yes: OD, E) or No	Bike Use Allowed (Y/N)
San Joaquin County										
00.00- T06.87	Jct. I-5 to Jct. SR-99 south	Principal Arterial	Urban	Y	Y	N	Y/HE	Y	N	N
T06.87 T6.83	Jct. SR-99 south to Austin Road	Other Principal Arterial	Urban							Y
T6.83- 15.86	Austin Road to Brennan Road	Other Principal Arterial	Rural							
15.86- 18.69	Brennan Road to Harrold	Other Principal Arterial	Urban							
18.69- 21.18	Harrold Avenue in Escalon to	Other Principal Arterial	Rural							

**Table 2.5: Corridor Designation and Functional Classification Continued**

Post Mile	Description	Functional Classification	Rural/Urban	NHS (Y/N)	FWY/EXPW System (Y/N)	STRAH-NET (Y/N)	IRRS (Yes: HE, F, G) or No	STAA (NTN/TA) or No	Scenic (Yes: OD, E) or No	Bike Use Allowed (Y/N)
Stanislaus County										
0.00-03.46	San Joaquin County Line to Valley Home Road	Other Principal Arterial	Rural	Y	Y	N	Y/HE	Y	N	Y
0.3.46-04.26	Valley Home Road to Stanislaus River	Other Principal Arterial	Rural/Urban							
04.26-10.11	Stanislaus River to 0.87 mi. E. of Wamble Road	Other Principal Arterial	Urban/Rural							
10.11-18.16	0.87 mi. E. of Wamble Road to Tuolumne County Line	Other Principal Arterial	Rural/Urban							
Tuolumne County										
R00.00-30.32	From the Stanislaus County Line to 0.25 miles west of Green Springs Road (4-lane expressway to beginning 2-lane expressway) to Wards Ferry/Big	Other Principal Arterial	Rural	Y	Y	N	Y/HE	Y(N starting at 23.9)	N	Y
30.32-32.55	Wards Ferry/Big Osks Road to Ferretti Road in Groveland	Other Principal Arterial								
32.55-R41.52	Ferretti Road in Groveland to Mariposa County Line	Other Principal Arterial								

**Table 2.5: Corridor Designation and Functional Classification Continued**

Post Mile	Description	Functional Classification	Rural/Urban	NHS (Y/N)	FWY/EXPW System (Y/N)	STRAH-NET (Y/N)	IRRS (Yes: HE, F, G) or No	STAA (NTN/TA) or No	Scenic (Yes: OD, E) or No	Bike Use Allowed (Y/N)
Mariposa County										
R41.52-43.75	Tuolumne County Line west to Tuolumne County Line east	Other Principal Arterial	Rural	Y	Y	N	Y/HE	N	N	Y
Tuolumne County										
43.75-R56.51	Mariposa County Line to Yosemite National Park	Other Principal Arterial	Rural	Y	Y	N	Y/HE	N	N	Y

Func. Class =Functional Classification

NHS = National Highway System

Fwy/Expwy Sys = Freeway/Expressway System

STRAHNET = Strategic Highway Network

IRRS = Interregional Road System (Yes: HE=High Emphasis, F=Focus, G=Gateway) or No

NTN = National Truck Network either: Yes: STAA – NTN or STAA - TA = Terminal Access - No

LOS = Level of Service

Scenic (Yes: OD= Officially Designated, E=Eligible) or No

## 2.6 Existing Route Concept Facility and Rationale

The route concept is comprised of two factors:

- 1) The minimum LOS tolerable for peak hour conditions.
- 2) The type of facility necessary to provide the concept LOS  
(Refer to Appendix A for LOS definitions).

The IRRS is a series of interregional State highway routes outside urbanized areas that provide access to, and links between, the State's economic centers, major recreational areas, and urban and rural regions. The concept LOS for an IRRS route in rural areas is "C," and "D" in urban and developing areas. The concept LOS for routes that are not on the Interregional Road System is "D." The concept LOS for the 20-year planning horizon for SR-120 is "D" in the urban portions of San Joaquin and Stanislaus Counties and is "C" in Tuolumne and Mariposa Counties.

Since SR-120 is an IRRS route in its entirety, the concept LOS for the 20-year planning horizon for SR-120 would either be LOS "C" or LOS "D" in San Joaquin, Stanislaus, Tuolumne and Mariposa Counties in accordance with the definition above. Excluding the portion between I-5 and SR-99, the concept LOS is similar in these four counties since most of them have SR-120 passing through the towns and communities as "main street highways." The remainder of SR-

120 passes through rural areas. Where SR-120 is concurrent with other State highways, SR-120 would need to be improved to maintain the same concept facility to maintain its continuity and connectivity with other State highways.

The UTC is the ultimate facility envisioned beyond the 20-year planning horizon. The UTC is identified to assist in the preservation of adequate right-of-way to accommodate future widening. The UTC for SR-120 varies. Refer to pages 62-64 for the segment location of interest. Keep in mind that the Concept Facility and the UTC only represent the future needs and are not exactly what the actual improvements will be to remedy deficiencies in a corridor.

## **2.7 TCR Transportation Network**

The TCR transportation network includes all modes of transportation: The SHS, major connecting arterials and parallel roads, rail and transit, park and ride lots, and bike and pedestrian routes.

### **2.7.1 State Highways, Connecting Routes**

State highways serve to facilitate faster travel between adjacent cities and for longer distance inter-regional travel. The following interstates and highways connect with SR-120 along the TCR corridor:

- Interstate 5 alignment perpendicular to SR-120 within San Joaquin County.
- State Route 99 alignment perpendicular to SR-120 within San Joaquin County.
- State Route 108 coincides with SR-120 from Oakdale to Yosemite Junction.
- State Route 49 coincides with SR-120 from Yosemite Junction to Big Oak Flat.

Interstate 5 to I-205 serve as a gateway connection between the San Joaquin Valley (SJV) and the Bay Area. Interstate 5 and SR-99 serve as a link to Lodi and Sacramento to the north and south into the SJV and beyond. State Route 108 links SR-120 to Sonora and east to I-395. State Route 49 links travelers to north and south travel between Tuolumne, Mariposa, Calaveras, and Amador Counties throughout the west side of the Sierra Nevada Mountains.

### **2.7.2 TCR Transportation Network - Transit, Park and Ride, Bikeway Facilities and Passenger Rail**

#### **2.7.2.1 Transit**

##### **San Joaquin County**

The communities in San Joaquin County near SR-120 are served by the following transit providers:

- The San Joaquin Regional Transit District (SJRTD)
  - <http://www.sanjoaquinrtd.com/>



- SJRTD has 18 transit lines serving portions of SR-120. Currently, there are no plans for expansion. However, plans for future expansion of transit services on SR-120 are dependent upon the implementation of HOV lanes on the corridor. SJRTD has recommended the consideration of HOV transit ramps to accommodate transit when considerations are made for implementing HOV lanes in San Joaquin County.
- San Joaquin County Transit Service
  - San Joaquin County Transit Service has six transit lines near SR-120.
- Greyhound
  - <http://www.greyhound.com/home/>
  - There is one Greyhound Station in Manteca and one in Oakdale.
- Altamont Commuter Express (ACE)
  - <http://www.acerail.com/Home.aspx>
  - There is one station/stop in Lathrop near SR-120.
- AMTRAK San Joaquin
  - [http://www.amtrak.com/servlet/ContentServer/AM\\_Route\\_C/1241245650084/1237405732511](http://www.amtrak.com/servlet/ContentServer/AM_Route_C/1241245650084/1237405732511)
  - There is one station in Stockton.
- Manteca
  - <http://www.ci.manteca.ca.us/mantecatransit/index.htm>
  - Various stations/stops in City of Manteca.
- Escalon (E-Trans).
  - <http://www.cityofescalon.org/transit.htm>

## **Stanislaus County**

Communities in Stanislaus County near SR-120 are served by transit services operated by the following providers:

- Stanislaus Regional Transit (StaRT)
  - <http://www.srt.org/>
- Modesto Area Express (MAX).
  - <http://www.modestoareaexpress.com/>
- SJRTD which provides deviated bus service between Escalon and Modesto, Monday-Friday with connections to StaRT and MAX.
  - <http://www.sanjoaquinrtd.com/>

The Riverbank-Oakdale Transit Authority (ROTA Trolley) no longer provides fixed route service as of July 2009 only Dial-a-Ride service.

## **Tuolumne County**

- Tuolumne County Transit Service
  - <http://www.tuolumnecountytransit.com/service.html>
  - Tuolumne County Transit Service currently has four fixed routes that offer regular weekday service between Sonora, Jamestown, Columbia, Twain Harte, and Sierra Village. Buses operate Monday through Friday between 6:00 a.m. and 9:00 p.m. Bus Route-4 offers a flex-route service that allows the bus to deviate

from the route to pick up passengers who have made prior reservations. In addition, plans are underway for installing transit bus stops for improving future transit options for traveling into Yosemite National Park from Tuolumne County. Dial-a-Ride offers curbside pick-up and drop-off service to disabled persons with and without Americans with Disabilities Act (ADA) of 1990 Certification and to persons who are 55 years of age and older. Saturday service is available between 9:00 a.m. and 4:00 p.m. to the general public within Sonora, Jamestown, Columbia, Twain Harte, Soulsbyville, and Standard areas. Saturday service is provided through a curb-to-curb dial-a-ride service, and requires advance reservations.

## **Mariposa County**

- Mariposa County Transit (Mari-Go)
  - <http://www.mariposacounty.org/index.aspx?NID=422>
  - Communities in Mariposa County are served by Mariposa Public Transit which is a dial-a-ride system that focuses on one designated area for coverage each day and is rotated on a weekly basis. This service picks up and returns passengers to their homes. It operates on weekdays only. However it can be set up for special events on weekends with prior approval from the Mariposa County Board of Supervisors.
  - On one day per week, Mariposa Northern County Transit, stationed in Coulterville, travels approximately 12 miles on SR-49 North until it reaches SR-120. It travels on SR-120 approximately three miles until reaching Jackson/Stint Road for dial-a-ride to Sonora, California between 10:00 a.m.- 2:00 p.m. It leaves at 2:00 p.m. for the return trip.
  - Medical Transportation is a service that is provided for seniors and Veterans scheduled for medical appointments in Mariposa (in town), Merced and Fresno. This service only operates on weekdays, and is also a dial-a-ride system.

### **2.7.2.2 Park and Ride**

Currently there are four existing park and ride lots on SR-120 in San Joaquin County. Two are located in Escalon, one at Viking and Main Streets near the railroad tracks with 42 parking spaces. The other is at SR-120 at Escalon-Bellota Road with 15 parking spaces. The third is at the Walmart Center in Manteca with 50 parking spaces. The fourth is located at the newly constructed Big League Dreams Sports Park close to the SR-120 and Airport Way interchange with 500 spaces. In Stanislaus County, there are no existing park and ride lots along SR-120, indicating a potential need for park and ride lots in this county. In Tuolumne County, there is one existing park and ride facility at SR-120 and Ponderosa Lane in the City of Groveland with eight parking spaces. Table 2.7.2.2a lists the existing park and ride facilities along the SR-120 corridor.



**Table 2.7.2.2a: Existing Park and Ride Facilities**

<b>Post Mile</b>	<b>Location</b>	<b># of Spaces</b>
<b>San Joaquin County</b>		
R3.418	Big League Dreams Sports Park close to SR-120 and Airport Way Interchange	500
5.31	Manteca at the Walmart Center at SR-120 and South Main Street Interchange in Manteca	50
17.03	At SR-120 and Escalon Bellota Road in Escalon	15
17.19	In Escalon at Viking and Main Streets near the Railroad Tracks	42
<b>Stanislaus County</b>		
None		
<b>Tuolumne County</b>		
32.20	In Groveland – SR-120 and Ponderosa Lane	8
<b>Mariposa County</b>		
None		

The San Joaquin Council of Governments Park and Ride Plan indicates that there is an overflow need of 200 percent at the park and ride lot at the Walmart Center in Manteca. The City of Manteca has required developers to include a park and ride lot at SR-120 and Union Road in Manteca as a condition for approval of the development.

In Stanislaus County, due to the lack of existing park and ride facilities, there is a need to consider new park and ride facilities. One is planned by Caltrans near SR-120 between Valley Home Road and Lancaster Road in Oakdale. In Tuolumne County, there are two planned park and ride facilities, one near Junction SR-120 and J-59 (La Grange Road), and the other at Yosemite Junction – the junction of SR-120 and SR-108. In order to provide easy access for transit buses through park and ride areas, new park and ride facilities should be located in areas that meet requirements for transit bus accessibility and maneuverability. Table 2.7.2.2b lists the planned park and ride facilities along SR-120.

**Table 2.7.2.2b: Planned Park and Ride Facilities**

<b>Post Mile</b>	<b>Location</b>
<b>San Joaquin County</b>	
1.33-1.33	Lathrop/Manteca Interchange – SR-120 at Yosemite Avenue
2.23-2.23	Manteca Interchange – SR-120 at McKinley Avenue
0.49-6.87	Manteca Widening Project – SR-120 between I-5 and SR-99
0.49-6.87	Manteca Widening Project – SR-120 between I-5 and SR-99
0.49-6.87	Manteca Widening Project – SR-120 between I-5 and SR-99
6.24-21.18	Escalon Bypass and Alternate Alignment – SR-120 between SR-99 and the Stanislaus County Line.
4.314	SR-120 at Union Road
<b>Stanislaus County</b>	
3.30-12.90	Near SR-120 between Valley Home Road and Lancaster Road in Oakdale

Table 2.7.2.2b: Planned Park and Ride Facilities Continued

Post Mile	Location
<b>Tuolumne County</b>	
8.19-8.19	Near Junction SR-120 and Highway J-59 (La Grange Road)
12.08-12.08	Yosemite Junction – Junction of SR-120 and SR-108
<b>Mariposa County</b>	
None	

### 2.7.2.3 Bikeway and Pedestrian Facilities

Caltrans views all transportation improvements as opportunities to improve safety, access and mobility for all travelers in California and recognizes bicycle, pedestrian and transit modes as integral elements of the Deputy Directive 64-R1, *Complete Streets-Integrating the Transportation System*, as policy to develop integrated multimodal projects in balance with community goals, plans and values. The connectivity of all modes of transportation including bikeway and pedestrian facilities should be considered when planning improvements along SR-120. Typically, if there are no alternative routes available for bicycles, bicycle access is permitted on freeways. Pedestrians are generally not permitted on freeways where bicycles are allowed. Although bicycles are not permitted on SR-120 between I-5 and SR-99, they are permitted on the remainder of the corridor.

Class I bikeways provide a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized. Class II bikeways provide a striped lane for one-way bike travel on a street or highway. Class III bikeways provide for shared use with pedestrian or motor vehicle traffic.

In San Joaquin County, the 2003 Manteca Bicycle Master Plan identifies an existing bicycle path that crosses SR-120 along Spreckles Road from East Atherton Road to Yosemite Avenue. In Stanislaus County, in the City of Oakdale, there is one existing Class II bicycle lane that crosses SR-120 on Maag Avenue from J Street to Burchell Hill Drive. In Tuolumne and Mariposa counties, there are no existing bike facilities that cross with SR-120. Table 2.7.2.3a lists the existing bike and pedestrian facilities crossing SR-120.

Table 2.7.2.3a: SR-120 Existing Bike and Pedestrian Facilities (Crossing SR-120)

Class Type	Location	Limits	
		From	To
San Joaquin County			
Class I	Manteca – Spreckles Avenue	East Atherton Road	Yosemite Avenue
Stanislaus County			
Class II	Oakdale – Maag Avenue	J Street	Burchell Hill Drive
Tuolumne County			
		None	
Mariposa County			
		None	

In the City of Manteca, there are two planned Class I bicycle paths crossing SR-120, at Union Road and Main Street. There are two proposed Class II bicycle lanes crossing SR-120, at McKinley Avenue and Airport Way. The 2002 Unincorporated San Joaquin County Bikeway Plan identifies three planned Class III bicycle routes crossing SR-120. The three planned Class III bicycle routes are located on Jack Tone Road from SR-99 to Lockeford, Austin Road from French Camp Road to Caswell Memorial State Park/Stanslaus River, and Airport Way from north of French Camp Road to Durnham Ferry Road. The 2007 Stanislaus Council of Governments Regional Transportation Plan identifies plans for a Class II or III bicycle route on 26 Mile Road from SR-120 to Dorsey Road. The 1996 Tuolumne County Transportation Council Regional Transportation Plan identifies plans for one priority bicycle and pedestrian facility in Groveland that crosses SR-120. It is on Ferretti Road. It is from Pine Mountain Lake Drive to Elder Lane at Tenaya School.

The 2002 Unincorporated San Joaquin County Bikeway Plan, the “City of Oakdale Bike Map”, the 2007 Stanislaus Council of Governments Regional Transportation Plan, and the 2003 City of Manteca Bike Plan, identify the planned bike facilities crossing SR-120 along the TCR corridor. The projects are listed in Table 2.7.2.3b:

**Table 2.7.2.3b: SR-120 Planned Bike and Pedestrian Facilities (Crossing SR-120)**

Class Type	Location	Limits	
		From	To
San Joaquin County			
Class I	Manteca - Union Street	Atherton Drive	Daniels Street
Class I	Manteca - Main Street	East Woodward Avenue	Industrial Park Drive
Class I	Manteca – McKinley Avenue	Wawona Street	Woodward Road
Class II	Manteca - Airport Way	Northern City Limits	Southern City Limits
Class III	Jack Tone Road	SR-99	Lockeford
Class III	Austin Road	French Camp Road	Caswell Memorial State Park/Stanislaus River
Class III	Airport Way	Above French Camp Road	Durham Ferry Road
Stanislaus County			
Class II or III	26 Mile Road	SR-120	Dorsey Road
Tuolumne County			
Bicycle/Pedestrian Class I	Groveland – Ferretti Road	Pine Mountain Lake Drive/Ferretti Road	Elder Lane/Tenaya School
Mariposa County			
None			

There are no existing bicycle facilities that are on SR-120 in San Joaquin County. In Stanislaus County there is one Class I bicycle path on SR-120 that stretches from the northern city limits of the City of Oakdale to A Street. In Tuolumne County there is one pedestrian path on SR-120 in Groveland through central downtown from West of Powerhouse Street to east of Ferretti Road. There is one Class I bicycle/pedestrian path in Groveland on SR-120 from Wayside Park to Tenaya School/Elder Lane. There are no existing bicycle facilities on SR-120 in Mariposa County. Existing bicycle routes on the SR-120 corridor are listed in Table 2.7.2.3c.

**Table 2.7.2.3c: Existing Bike and Pedestrian Facilities Connecting or Part of SR-120**

Class Type	Location	Limits	
San Joaquin County			
None			
Stanislaus County			
Class I	Oakdale – SR-120	Northern City Limits	A Street
Tuolumne County			
Pedestrian	Groveland – SR-120 through central downtown Groveland	West of Powerhouse Street	East of Ferretti Road
Bicycle/Pedestrian Class I	Groveland – SR-120	Wayside Park/SR-120	Tenaya School/Elder Lane
Mariposa County			
None			

There are two planned bicycle facilities in San Joaquin County on SR-120. One that will be a Class II facility located on Yosemite Avenue/SR-120 from west of SR-99 to east of SR-99. The second will be on SR-120 between Austin Road and the Stanislaus County Line. In Stanislaus County there are four Class II or III bicycle routes planned on SR-120 from Willms Road to the Tuolumne County Line, from the Oakdale City limits to SR-108/120, from Yosemite Boulevard to East Avenue and from the San Joaquin County Line to the city of Oakdale limits. In Tuolumne County, there is one Class I bicycle and pedestrian path planned for SR-120 from Wayside Park to Tenaya School/Elder Lane. Planned bicycle routes which will be located directly on the SR-120 corridor are listed in Table 2.7.2.3d.

**Table 2.7.2.3d: Planned Bike and Pedestrian Facilities Connecting or Part of SR-120**

Class Type	Location	Limits	
San Joaquin County			
Class II	Yosemite Avenue/SR-120	West of SR-99	East of SR-99
Class III	SR-120	Austin Road	Stanislaus County Line
Stanislaus County			
Class II or III	SR-120	Willms Road	Tuolumne County Line
Class II or III	SR-120	Oakdale City Limits	SR-108/120
Class II or III	SR-120	Yosemite Blvd	East Avenue
Class II or III	SR-120	San Joaquin County Line	City of Oakdale limits
Tuolumne County			
Pedestrian	Groveland – SR-120 through central downtown Groveland	West of Powerhouse Street	East of Ferretti Road
Bicycle/Pedestrian Class I	Groveland – SR-120	Wayside Park/SR-120	Tenaya School/Elder Lane
Mariposa County			
None			

## 2.7.2.4 Passenger Rail

### 2.7.2.4.1 Amtrak

The Amtrak San Joaquin runs north-south, linking Bakersfield and the Bay Area with stops in Fresno, Madera, Stockton, Lodi and Sacramento. San Joaquin trains operate six times in each direction 365 days per year. At the present time, four round trips operate daily between the Bay Area and Bakersfield, and two round trips operate directly between Sacramento and Bakersfield. Some portions of the trip may be provided via Amtrak Motorcoach. Adding additional trains to the existing San Joaquin line has been considered. Amtrak San Joaquin also goes west/east from Stockton to Oakland twice each day.

### 2.7.2.4.2 Altamont Commuter Express

Rail lines in San Joaquin County are used for both passenger and freight services. The ACE provides commuter rail between San Joaquin County and Silicon Valley/San Jose. In San Joaquin County, ACE stations are located in Stockton, Lathrop, and Tracy. This service operates weekdays with four trains running in the morning towards San Jose and four trains returning to Stockton in the afternoon and evening. Total running time from end to end is just over two hours with interim stops at Vasco Road (Livermore), Pleasanton, Fremont, Santa Clara - Great America amusement park, downtown Santa Clara, and San Jose (see Figure 2.7.2.4.2).

Figure 2.7.2.4.2: ACE Map



The primary short range goal of ACE is to acquire dedicated rights-of-way from Stockton to points west of the Altamont Pass, in order to avoid conflicts with freight trains and allowing rail improvements; therefore, allowing increased frequency, improved speed and increased reliability of its service. This will allow it to attract and serve more riders. ACE plans to extend its service to both Sacramento and Modesto in the long-term.

ACE has identified, at a minimum, the need for two additional trains to adequately serve the work schedules of Tri-Valley commuters. ACE trains currently operate on tracks owned by Union Pacific (UP) who has indicated that they will not be allowing any additional passenger trains in their primary routes due to an unprecedented amount of freight growth over the next five to 10 years. This is having an increasingly negative impact on the ACE service in terms of on-time performance, train speeds, and flexibility in scheduling. San Joaquin Regional Rail Commission (SJRRRC) has identified the need to own and control the rail corridor, for ACE service to realize its full potential to carry large numbers of passengers and significantly contribute to the region's mobility. SJRRRC is currently conducting a regional study aimed at

improving the ACE rail through the purchase and control of the rail corridor (SJRRRC Short Range Transit Plan).

#### **2.7.2.4.3 High Speed Rail**

The California High Speed Rail (HSR) Authority is currently studying two separate rail corridors that run through the SR-120 Corridor in San Joaquin County. The study area includes the Merced to Sacramento section, and the Altamont Corridor section rail project which are both Phase II corridors.

##### Merced to Sacramento

The HSR Authority proposes to construct, operate and maintain an electric powered steel-wheel-on-steel-rail High Speed Train System, from both Sacramento and San Francisco, via Fresno and Los Angeles, to both San Diego and Anaheim, capable of operating speeds of 220 mph on mostly dedicated, full grade separated track. The Merced to Sacramento section would include stations in downtown Sacramento, downtown Stockton, and either downtown Modesto or the Modesto Amtrak Station. The first tiered programmatic Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the entire statewide system was completed in 2005 and the notice of preparation and notice of intent on the Merced to Sacramento section EIR/EIS was released on December 23, 2009. The study will consider the operation of a regional passenger train service running on the High Speed Train System track with its own regional stations, in cooperation with the San Joaquin Regional Rail Commission. This project would provide a new high speed transit alternative on the I-5 corridor.

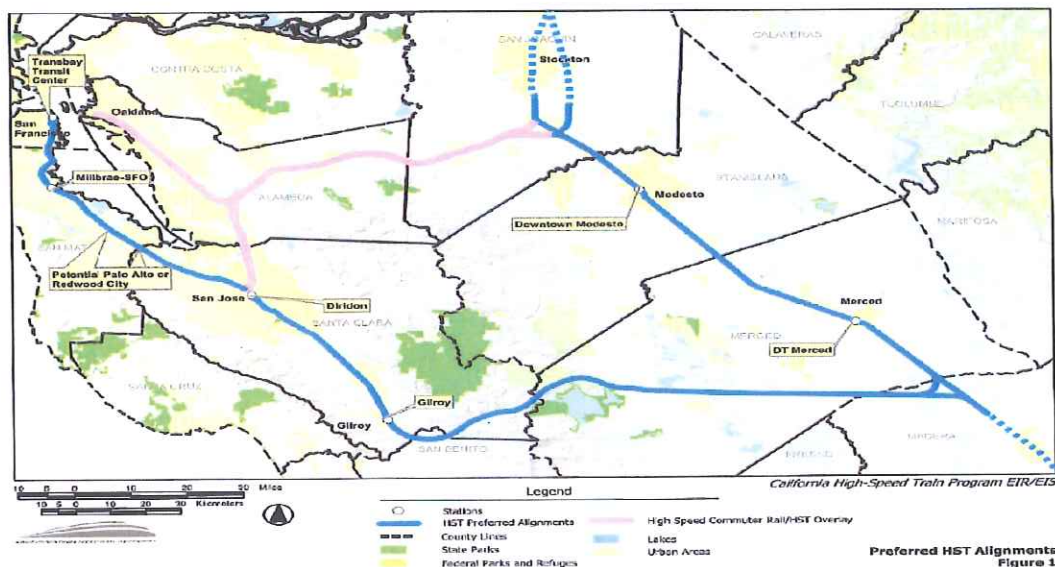
##### Pacheco Pass Alignment

In December 2007, the HSR selected the Pacheco Pass alignment as part of the required environmental studies for the San Francisco Bay Area-Central Valley connection. It would sweep into the San Francisco Bay Area over the pass between the Los Banos area (Merced County) and Gilroy, head north to San Jose, then up the Peninsula along the Caltrain right-of-way to San Francisco. The Altamont proposal will cross the pass west of Tracy and connect to the Bay Area in San Jose (see Figure 2.7.2.4.3).

##### Altamont Corridor

The HSR Authority proposes to upgrade the ACE regional rail service, including a new branch line allowing service between Tracy and Modesto. When the Authority chose the Pacheco Pass for the High Speed Train alignment between the Bay Area and the Central Valley, it decided to study the Altamont corridor for a joint-use rail infrastructure project that would pursue a different purpose and need from the high speed train system. This study is being conducted by the HSR Authority because passenger trains on this improved corridor may reach speeds of 125 miles per hour.





**Figure 2.7.2.4.3 High Speed Rail**

#### **2.7.2.4.4 Passenger Rail in Mariposa and Tuolumne Counties**

There is no commercial passenger rail service either in Tuolumne or Mariposa counties. In Tuolumne County there is a private local rail route for tourists. Most city and county residents near SR-120 seeking rail service out of county/out of state obtain passenger rail service through Amtrak and ACE in the major SJV cities or in Sacramento via local transit routes. The historic Sierra Railroad, “The Movie Railroad” was built in 1897 connecting the Gold Country and Central Valley. The 55-mile historic railroad stretches from Riverbank in Stanislaus County to Sonora in Tuolumne County. It provides visitors an opportunity to travel on the historic Sierra Railroad while enjoying a meal, beautiful countryside, and entertainment. The train boards in Oakdale, which is 90 miles east of San Francisco and 70 miles south of Sacramento. There are plans to extend the route toward Yosemite National Park on a long closed right-of-way when funds can be obtained.

## **2.8 Goods Movement**

In San Joaquin County, the intermodal system includes these components: state and interstate highway system, the inland Port of Stockton, the major railroads, the Stockton metropolitan airport, and the rail inter-modal yards. San Joaquin County is a major Northern California distribution point where the two primary north-south highways, I-5 and SR-99, are joined by SR-120 through the City of Manteca, and SR-4 (Cross-town Freeway) through downtown Stockton.

Stockton's deep water port and airport provide international transport links. The international link can also be made through San Francisco Bay Area air and shipping distribution ports. The location advantage, coupled with shipping/receiving facilities such as the Union Pacific Intermodal Facility, the Stockton deep water port, the Stockton Airport, and the transportation infrastructure has made San Joaquin County an attractive location for warehouses and distribution centers.

SR-120 is a main inland route through the connecting major cities throughout the SJV region with the San Francisco Bay Area to the west and the Sierra Nevada Mountains to the east. The SJV is one of the four major international trade regions in California, designated in the 2002 Global Gateways Development Program. The SJV Goods Movement Study, prepared for Caltrans and the eight counties of the SJV (San Joaquin, Stanislaus, Merced, Kern, Fresno, Tulare, Kings and Madera), determined that trucking is the dominant mode for moving freight. The increase in freight movement by trucks on State highways is growing faster than can be accommodated by the existing capacity.

The 2007 AADT on SR-120 in San Joaquin County ranged from 11,800 to 67,800 vehicles with trucks constituting 15.0 percent of the AADT in some sections. Truck volumes ranged from 2,400 to 9,200 with five axle truck volumes representing up to approximately 95 percent of total truck volumes in some sections.

The 2007 AADT on SR-120 in Stanislaus County ranged from 12,461 to 22,600 vehicles with trucks constituting 15 percent of the AADT in some sections. Truck volumes ranged from 200 to 1,700 with five axle truck volumes representing up to approximately 64 percent of total truck volumes in some sections.

The 2007 AADT on SR-120 in Tuolumne County ranged from 3,000 to 16,100 vehicles with trucks constituting 11 percent of the AADT in some sections. Truck volumes ranged from 200 to 1,700 with five axle truck volumes representing up to approximately 40 percent of total truck volumes in some sections.

The 2007 AADT on SR-120 in Mariposa County is approximately 3,700 vehicles per day with trucks constituting 3 percent of the AADT. Truck volumes are approximately 100 vehicles per day with five axle truck volumes representing approximately 10 percent of total truck volumes.

### **2.8.1 Trade Corridor**

The CTC has awarded Proposition 1B Corridor Mobility Improvement Account (CMIA) Trade Corridor Improvement Funds (TCIF) to extend the SR-4 Cross-town Freeway in Stockton to Navy Drive to improve goods movement and access to and from the Stockton Port. The Port of Stockton was also awarded TCIF funds to deepen the Stockton Ship Channel for improved access to the San Francisco Bay.

### **2.8.2 Port of Stockton**

The Port of Stockton is located on the Stockton Deepwater Ship Channel, 75 nautical miles due east of the Golden Gate Bridge. In the 1930's the Port of Stockton facilities were built and the deep water channel was dredged to accommodate ocean going vessels. The Port is located one mile from I-5 and all interconnecting major highway systems.

### 2.8.3 San Joaquin Valley Short Haul Rail/Inland Port Project

The California Transportation Commission has awarded the TCIF for the development of the SJV Short Haul Rail/Inland Port Project located in Crows Landing, Stanislaus County at the old Crows Landing Air Facility. It involves the development of an inland port logistics center, and the construction of a short haul rail service. The project railroad right of way acquisition and construction of a 170-acre rail inter-modal facility will provide for the loading and unloading of containers from rail cars. This project will provide a rail link between the SJV and Oakland. There will be an air facility for future corporate air traffic made possible. The project is currently under California Environmental Quality Act (CEQA) review with National Environmental Policy Act (NEPA) review following. It has also been discussed that by lowering the railroad tracks that the rail cars can be double stacked to increase bulk transport and help reduce emissions.

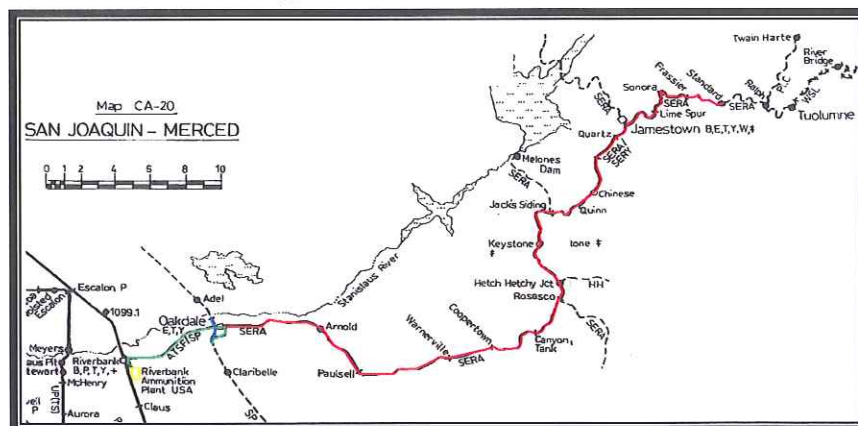
### 2.8.4 Freight

State Route 120 is vital to the goods movement network between the SJV and the San Francisco/San Jose/Bay Area and the Sierra Nevada Mountains to the east. Within the last ten years, SR-120 has experienced dramatic traffic growth and levels of congestion with truck traffic at volumes much higher than the statewide average for the highway system. The corridor is heavily used by trucks for both interregional goods movement between the SJV and the San Francisco/San Jose/Bay Area and for local farm and commercial truck trips.

Several major railways stretch through large portions or the entire San Joaquin County, including the UP and Burlington Northern Santa Fe (BNSF) Railroad. The UP and BNSF inter-modal terminals serve both San Joaquin and Sacramento regions. Stockton serves as a hub for many of these railways and acts as a major distribution center for freight shipped to locations throughout California and the United States.

In Stanislaus County there are over 90 interstate truck lines and 100 contract carriers. These operators, distributed throughout the region, rely on the regional system of State highways, expressways, and major arterials to move supplies and products on the highways (SR-120, SR-99, I-5 and SR-132). Trains provide an economical means of transporting bulk goods. The Stanislaus region is serviced by two transcontinental railroad systems, the UP and the BNSF Railway, and two local railroad systems, the Modesto and Empire Traction Company and the Sierra Railroad. See Figure 2.8.4 Sierra Railroad.

**Figure 2.8.4: Sierra Railroad**





Rail and truck transport from Stanislaus County is available. In Tuolumne County, according to the City of Sonora General Plan, there is an existing need to increase freight capacity without increasing rail traffic through the City of Sonora. The Sierra Northern Railway has trains that pass through the City of Sonora two to three times each week to reach the Sierra Pacific Industries industrial park at Standard. The lumber operation, along the mainstay of the facility is closing temporarily due to economic conditions. The Sierra Railroad in Stanislaus and Tuolumne counties offer daily industrial freight service that connects to both the UP and BNSF in Riverbank. Rail docks are located in Chinese Camp, Standard, Oakdale and Riverbank and Sierra. Sierra Railroad is the first railroad in the world to operate on 100 percent pure bio-diesel.

Mariposa County does not currently contain significant active rail lines or transportation related pipelines. The Yosemite Valley Railroad was incorporated on December 19, 1902, to provide transportation to the large timber areas and the limestone in the surrounding region. Likewise, it saw the beauty of the Yosemite Valley as a natural tourist attraction. In May of 1907, it opened its initial 79.12 mile line from Merced to El Portal, along the Merced River. In addition, it built over nine-miles of spurs, sidings, yard and other support track. The company's last mixed train run was on April 24, 1945. Although there were several last minute attempts by many to save it no one could come up with the necessary capital and the Yosemite Valley Railway officially abandoned its line in September of 1945.

## 2.8.5 STAA and Truck Parking Issues

The region is currently experiencing goods movement constraints due to the lack of local STAA routes and available truck parking. These issues are currently being evaluated by the San Joaquin Goods Movement Task Force. Local, regional, and State STAA maps can be located at: <http://www.dot.ca.gov/hq/traffops/trucks/truckmap/index.htm>. Table 2.8.5 provides the truck network conditions on SR-120. The truck designations represent today's conditions and may change over time.

**Table 2.8.5: Truck Network**

Postmile	Description	National Truck Network (Yes/No)	STAA, TA = Terminal Access (Yes/No):
<b>San Joaquin County</b>			
0.00-21.18	Jct. 1-5 to STA County Line	No	Yes
<b>Stanislaus County</b>			
0.00-18.16	San Joaquin County Line to Tuolumne County Line	No	Yes
<b>Tuolumne County</b>			
R0.00-23.9	Tuolumne County Line to S JCT SR-49, PM 23.9	No	Yes
23.9-R41.52	SR-49 to Mariposa County Line	No	No*
<b>Mariposa County</b>			
R41.52/43.75	Tuolumne County Line to Tuolumne County Line	No	No*
<b>Tuolumne County</b>			
43.75/R56.51	Mariposa County Line to Yosemite National Park	No	No*
*This portion of SR-120 is designated as California Legal Advisory for vehicles with a kingpin-to-rear-axle length of over 30 feet.			

### **2.8.6 Airport**

There is only one commercial airport in proximity to the SR-120 corridor, the Stockton Metropolitan Airport. There are two non-commercial airports adjacent to SR-120, one in Oakdale, the Oakdale Municipal Airport and the other in Groveland, the Pine Mountain Lake Airport.

#### **San Joaquin County**

The Stockton Metropolitan Airport is the primary public access airport in San Joaquin County. The airport currently provides passenger service through Allegiant Air including two to five flights weekly to Las Vegas, Nevada. The airport is located between two major north-south thoroughfares; I-5, 1.5 miles to the west, and SR-99, which borders the airport to the east. The airport is situated on 1,449 acres of land and has an 8,650 foot long, 150 foot wide primary Instrument Landing System runway, with a take off distance available of 11,037 feet. The Stockton Metropolitan Airport also has a 4,458 foot long, 75 foot wide general aviation runway. Six air carrier gates adjoin the 44,355 square-foot terminal building. Other general aviation airports in the county include Escalon Airport, Lodi Airport and Tracy Municipal Airport. The Tracy Municipal Airport includes 310 acres of land and has two 4,000 foot long, 100 foot wide general aviation runways. In Lodi there are also two airparks, the Lodi Airpark and the Kingdon Airpark.

#### **Stanislaus County**

In Stanislaus County, the Modesto City-County Airport is a commercial and general aviation airport with 458 acres, 5,911 foot air carrier runway, and 3,459 foot general aviation runway. The Oakdale Municipal Airport is a general aviation airport with 117 acres and a 3,015 foot runway. The Turlock Municipal Airport is 640 acres with a 3,000 foot runway in southern Stanislaus County. There is the Crows Landing Naval Auxiliary Landing Facility, 1,528 acres which is abandoned. The Modesto City-County Airport is the only airport reporting cargo operations.

#### **Tuolumne County**

Tuolumne County operates two airports, one in Groveland (Pine Mountain Lake Airport) and one in Columbia. Pine Mountain Lake (PML) Airport is surrounded by a residential airpark whose residents use their aircraft to commute to work, for business travel, for travel to their second home, and to travel on vacation. Columbia Airport contains several aviation businesses that serve the aviation community. These businesses include two air charter companies, a flight school, two aircraft maintenance facilities, and an air ambulance service. Additionally, Columbia Airport is a CAL FIRE tanker base. Columbia Airport features a fly in only campground which is a travel destination for numerous pilots and aviation groups primarily during the summer months. Of the heliports located in Tuolumne County, one, Bald Mountain Heliport is located on SR-108 near Cold Springs and is maintained by the U.S. Department of Forestry and one is the heliport owned and maintained by Sonora Regional Medical Center for medical emergency transport services. The Tuolumne County Airports Department does not



manage either of these two heliports. Each heliport is managed by separate jurisdictions and functions independently.

## **Mariposa County**

Mariposa County has one publicly owned airport, The Mariposa-Yosemite Airport is owned, operated, and managed by the County. The airport is located approximately 4.5 miles northwest of the Town of Mariposa. Access to the airport is primarily provided via State Route 49.

The Mariposa-Yosemite Airport is classified within the General Aviation category. The airport has one 3,300 foot paved runway and an adjacent taxiway, and is located at an elevation of 2,250 feet. Equipped with a flight service station, control area, flight instructions, charter air service, the airport is capable of handling all general aviation aircraft except for some business jets. Currently the airport has 51 airplane tie-downs, 3 helipads, and 47 hangers. In Mariposa County there is a heliport located at John C. Freemont Hospital and in the SR-120 vicinity at Buck Meadows there is also a heliport operated by the United States Forest Service.

### **2.8.7 Warehousing and Distribution**

The South Stockton/Manteca area is becoming one of the fastest growing warehousing and distribution centers in California. Being a pivotal hub for transfer of goods between the SJV and the San Francisco/San Jose/Bay Area region, new warehousing and distribution centers for northern California and for the Bay Area are continuing to locate in the southern parts of San Joaquin County and at the Port of Stockton.

The Defense Logistics Agency San Joaquin Depot is made up of distribution facilities at three separate locations: Tracy, Sharpe and Stockton's Rough and Ready Island near the Port of Stockton. The Depot receives, stores, and ships supplies to military customers located mainly in the western U.S. and the Pacific Theater of operations, and in some cases worldwide.

## **2.9 Transportation System Management**

Transportation System Management (TSM) is the implementation of policies, strategies and technologies to improve highway performance. Ramp metering and High Occupancy Vehicle lanes represent two potential strategies in a comprehensive and integrated approach to managing the region's freeways in San Joaquin and Stanislaus counties. Other potential TSM elements include incident management, traveler information, traffic surveillance and detection, and advanced traffic signals. The overriding objectives of any TSM program are to minimize congestion (and its side effects), improve safety, enhance overall mobility, and provide support to other agencies during emergencies. Often, a combination of strategies is needed to effectively and efficiently achieve these objectives. SJCOG and Caltrans District 10 have completed a Ramp Metering and HOV Lane Study.

San Joaquin and Stanislaus Counties have grown significantly in recent years and are projected to experience continued significant growth in the coming decades. While several freeway/highway improvement projects are planned within both counties, traffic forecasts

indicate that the planned construction of new highway capacity will not keep pace with this growth, and additional capacity-increasing projects are subject to funding and environmental constraints. As a result, proper management of the region's transportation system can provide practical and cost-effective alternatives (potentially in combination with capacity improvements) for addressing transportation problems. In Tuolumne and Mariposa Counties, TSM is becoming more and more important in management of two lane conventional highways and expressways.

### **2.9.1 Intelligent Transportation Systems**

Intelligent Transportation Systems (ITS) technology is used for incident notification, and freeway management through technologies such as dynamic message and warning signs, Highway Advisory Radio (HAR), Roadside Weather Information Systems (RWIS), Closed Circuit Television (CCTV) cameras that monitor traffic, and Changeable Message Signs (CMS) that generally display road closure/road condition information. In addition to the cameras, traffic monitors are located in specific locations to feed traffic data to the Transportation Management Centers (TMCs) in each Caltrans district. Some traffic monitors are linked to the University of California (U.C.) Berkeley Performance Monitoring System (PeMS) for use in distribution of data to many users.

Deployment of ITS technology will enhance traveler information services as well as the operational efficiency of the corridor by informing motorists of traffic congestion, inclement weather, such as fog, dust, incident management, emergency response and highway construction and/or closings. This information assists motorists to make informed decisions regarding their travel. ITS includes traffic signals, CCTV, CMS, ramp meters, weigh-in-motion devices, freeway service patrols, weather stations, and HAR stations. Also included is the centralization and control of many of these components from TMCs.

Traveler information broadcast systems, traffic signal priority for emergency or transit vehicles, ITS data archive management, and vehicle safety warning systems are all part of ITS. The "511" system is a new three-digit phone number program to access traveler information that is being implemented throughout the State. All eight SJV counties, San Joaquin, Stanislaus, Merced, Kern, Tulare, Kings, Fresno and Madera have recently made the decision to partner with the Sacramento Area Council of Governments (SACOG) to join the 511 system in the northern Sacramento area region which will provide wireless (cell phone) service only. Cell phone service in the mountain counties is intermittently available based on where there is cell phone coverage. The mountain counties have not opted to participate directly which primarily limits access to their transit information. Enabling the 511 information via the telephone and an internet 511 website is funded through a grant that was received by Caltrans, District 6, Traffic Operations Division to build out a pilot fog warning system along 12 miles of SR-99 in Tulare and Fresno counties. The 511 telephone service will be activated where possible based on funding availability for all of the eight counties in the San Joaquin Valley as well as the mountain counties. The City of Fresno has offered to provide website hosting and 10 hours of in-kind technical support per month for the three years after July 1, 2010. Thereafter, it will become the responsibility of the San Joaquin Valley to find funding sources for the maintenance, operation and development of the SJV 511 system. Nationwide, 511 deployment by 2010 was legislated in the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETY-LU Section 5201 (B)).

SACOG is currently looking at future plans to integrate 511 with a Sacramento Transportation Area Network or STARNET, that is an information exchange network and operations coordination framework that will be used by the operators of transportation facilities and emergency responders. STARNET will build upon previous ITS investments by using, with little to no modifications, the existing field infrastructure (cameras, changeable message signs, traffic signals, vehicle location systems, etc) and central systems (freeway management systems, traffic signal systems, transit management systems, computer aided dispatch systems, etc) already operated by each agency. As part of the STARNET implementation, interfaces will be developed to these existing systems to enable them to share data and video with each other, provide data and video to the public via the 511 regional travel information system, and provide operations and emergency response personnel with a map based regional transportation management display.

The communication lines necessary to transmit all of the ITS data will be enhanced by the fiber optic network planned along the SR-120 corridor, along with the other corridors in the SJV area. The fiber optic network to the Caltrans District 10 TMC in Stockton will relay this data. From this location, the TMC can monitor transportation system conditions and provide for rapid response when conditions deteriorate. There is a methodology established which provides for cooperation and electronic sharing of information between the District 6 TMC in Fresno and the District 10 TMC in Stockton.

Currently, there is a regional architecture in existence called the "SJV ITS." This architecture covers the eight counties within the SJV (San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Kern). This plan is available online at: <http://www.kimley-horn.com/Caarchitecture/task9/sjintor.htm>.

Table 2.9.1a lists 43 existing ITS elements along the SR-120 corridor. Table 2.9.1b identifies the five ITS elements that have been funded and programmed and Table 2.9.1c identifies the 12 ITS elements that are planned for the corridor but not yet funded. Table 2.9.1a lists 43 existing ITS elements along the SR-120 corridor. There are 31 existing ITS elements in San Joaquin County, two in Stanislaus County, seven in Tuolumne County and three in Mariposa County.



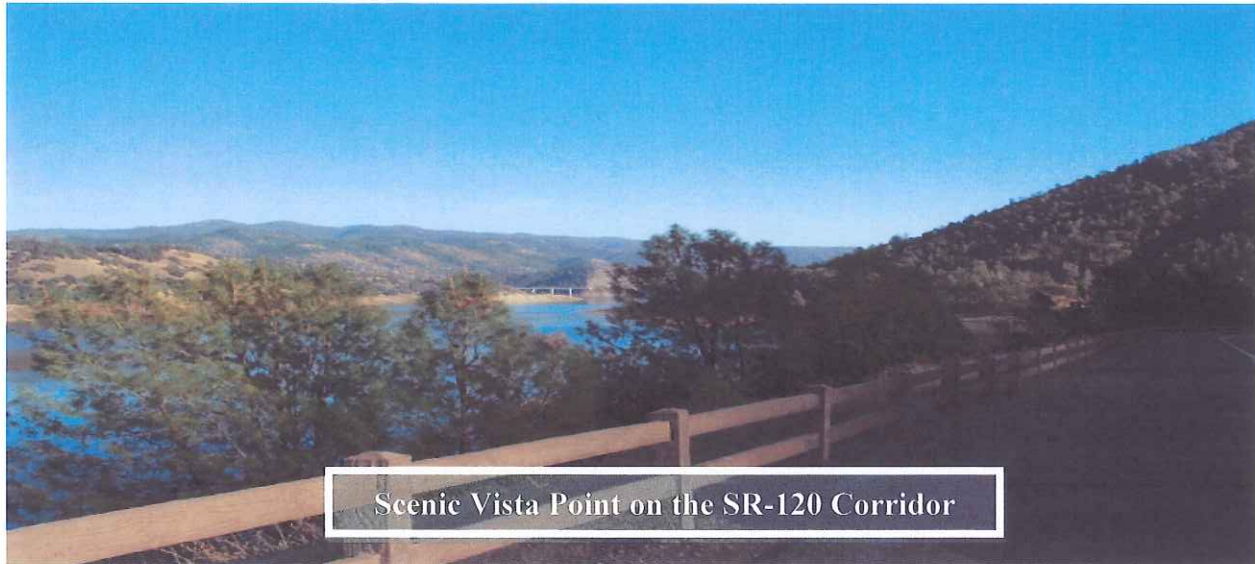
**Table 2.9.1a: Existing ITS Elements**

No.	Post Mile	Location	Equipment/Description	Use
STATE ROUTE 120 SAN JOAQUIN COUNTY				
1	R0.493	JCT I-5	RWIS	Weather Station
2	R0.493	WB N/O JCT SB I-5	TMS	Traffic Monitoring
3	R0.544	WB W/O JCT RTE NB I-5	TMS	Traffic Monitoring
4	0.6	WB Before JCT I-5	CMS #9	Highway Advisory
5	0.918	WB E/O JCT I-5	TMS	Traffic Monitoring
6	1.273	WB W/O Yosemite Ave.	TMS	Traffic Monitoring
7	1.766	WB Wyche OH	TMS	Traffic Monitoring
8	2.258	WB McKinley Ave. UC	TMS	Traffic Monitoring
9	2.28	McKinley Ave. UC	RWIS	Weather Station
10	2.713	WB W/O Airport Way	TMS	Traffic Monitoring
11	2.76	WB W/O Airport Way onramp	CMS #8	Highway Advisory
12	3.338	WB Airport Way OC	TMS	Traffic Monitoring
13	3.76	EB W/O Union Ave.	CMS #16/CCTV	Highway Advisory

**Table 2.9.1a: Existing ITS Elements Continued**

No.	Post Mile	Location	Equipment/Description	Use
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>				
14	3.83	WB W/O Union Ave.	TMS	Traffic Monitoring
15	3.84	Airport Way	RWIS	Weather Station
16	4.117	EB W/O Main St.	TMS	Traffic Monitoring
17	4.323	EB/WB Union Ave. OC	TMS	Traffic Monitoring
18	4.55	WB E/O Union Ave. OC	TMS	Traffic Monitoring
19	4.777	EB/WB W/O Main St.	TMS	Traffic Monitoring
20	4.79	WB Union Ave.	CMS #7	Highway Advisory
21	5.05	EB W/O Main St.	CMS #17/CCTV	Highway Advisory
22	5.063	WB W/O Main St.	TMS	Traffic Monitoring
23	5.31	EB E/O Main St.	TMS	Traffic Monitoring
24	5.56	Main St.	RWIS	Weather Station
25	5.576	WB E/O Main St.	TMS	Traffic Monitoring
26	6.06	WB W/O SR-99	TMS	Traffic Monitoring
27	6.07	WB before Main St.	CMS #6	Highway Advisory
28	6.53	NB JCT 99	CCTV	Traffic Monitoring
29	6.872	EB/WB South JCT SR-99	TMS	Traffic Monitoring
30	7.58	EB E/O Manteca	CMS #20	Highway Advisory
31	21.18	EB/WB San Joaquin/Stanislaus County Line	TMS	Traffic Monitoring
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>				
1	7.225	EB/WB Deo Gloria Rd.	TMS	Traffic Monitoring
2	7.54	EB E/O Atlas Rd.	CMS	Highway Advisory





**Table 2.9.1a: Existing ITS Elements Continued**

No.	Post Mile	Location	Equipment/Description	Use
<b>STATE ROUTE 120 TUOLUMNE COUNTY</b>				
1	L0.90	SR-108 near Chinese Camp	HAR	Highway Advisory
2	11.70	SR-120 EB/WB W/O Yosemite JCT	PEMS ID	Traffic Monitoring
3	11.75	SR-120 EB W/O Yosemite JCT	CMS #43 Yosemite JCT	Highway Advisory
4	11.37	SR-120 EB/WB Obyrnes Ferry Rd.	TMS	Traffic Monitoring
5	23.73	SR-120 EB Moccasin	CMS #45	Highway Advisory
6	R23.897	SR-120 S/O JCT SR-49	TMS	Traffic Monitoring
7	R38.9	SR-120 Hells Hollow Rd.	TMS	Traffic Monitoring
<b>STATE ROUTE 120 MARIPOSA COUNTY</b>				
1	43.69	EB SR-120 Buck Meadows	CMS #96	Highway Advisory
2	43.69	Buck Meadows	HAR	Highway Advisory Radio
3	43.74	WB County Line	Blue/White Information Sign	Highway Advisory Radio Support

Table 2.9.1b lists five ITS elements that are currently programmed to be installed on the SR-120 TCR corridor. There are two programmed ITS elements in San Joaquin County, none

programmed in Stanislaus County, three programmed in Tuolumne County and none programmed in Mariposa County. For Tuolumne County, Caltrans staff will review the Old Priest Grade Road Feasibility Study to ensure that those previous plans will still be carried through.

**Table 2.9.1b: Programmed ITS Elements**

No.	EA#/RTP MPO ID	Post Mile	Direction	Location	Equipment/Description	Use	SHOPP Priority (Short/Med or Long Term)
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>							
1	3A380	R1.76	EB	Wyche OH	CMS/CCTV	Highway Advisory	UNK
2	0E610	5.85	UNK	SR-99	HAR/Support EMS signs on SR-99	Highway Advisory Radio	UNK
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>							
None							
<b>STATE ROUTE 120 TUOLUMNE COUNTY</b>							
1	0T360	10.0	Facing EB Traffic	SR-120 W/O Obyrnes Ferry Rd.	Blue/White Information Sign with Flashing Beacon/Serves SR-120, SR-108 and SR-49 corridors	Highway Advisory Radio Support	Short 0-4 yrs
2	0T360	13.0	Facing SB Traffic	SR-49	Blue/White Information Sign with Flashing Beacon/Serves SR-120, SR-108 and SR-49 corridors	Highway Advisory Radio Support	Short 0-4 yrs
3	0T360	16.0	Facing WB Traffic	SR-120	Blue/White Information Sign with Flashing Beacon/Serves SR-120,SR-108 and SR-49 corridors	Highway Advisory Radio Support	Short 0-4 yrs
<b>STATE ROUTE 120 MARIPOSA COUNTY</b>							
None							

Table 2.9.1c lists 12 ITS element projects currently planned for the SR-120 TCR corridor. There are seven planned in San Joaquin County, three planned in Stanislaus County, two planned in Tuolumne County and none planned in Mariposa County. Potential locations for implementation of ramp meter infrastructure along the corridor have been identified in the completion of the San Joaquin Regional Ramp Metering and HOV Master Plan. For Tuolumne County, Caltrans staff will review the Old Priest Grade Road Feasibility Study to ensure that those previous plans will still be carried through.

**Table 2.9.1c: Planned ITS Elements**

No.	EA#/RTP MPO ID	Post Mile	Direction	Location	Equipment/Description	Use	SHOPP Priority (Short/Mid-term or Long Term)
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>							
1	TBD	5.5	EB	Main St.	EMS	Highway Advisory Radio Support	Mid-term 5-7 yrs
2	TBD	R5.700	EB/WB	S Main St	CCTV	Traffic Monitoring	Mid-term 5-7 yrs
3	TBD	7.2	WB	Austin Rd.	CMS	Highway Advisory	Mid-term 5-7 yrs
4	TBD	7.5	WB	E/O Austin Rd	CMS	Highway Advisory	Mid-term 5-7 yrs
5	TBD	7.8	WB	E/O Austin Rd.	EMS	Highway Advisory Radio Support	Mid-term 5-7 yrs
6	TBD	13.0	WB	Carrolton Rd.	CMS	Highway Advisory	Mid-term 5-7 yrs
7	TBD	16.0	EB	Brennan Ave.	CMS	Highway Advisory	Mid-term 5-7 yrs
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>							
1	TBD	R2.80	EB	W/O Valley Home Rd	CMS/TMS	Highway Advisory	Mid-term 5-7 yrs
2	TBD	R14.26	EB/WB	2 mi. E/O Blitz Creek	RWIS	Weather Station	Mid-term 5-7 yrs
3	TBD	R14.26	WB	2 mi. E/O Blitz Creek	CMS/TMS	Highway Advisory	Mid-term 5-7 yrs
<b>STATE ROUTE 120 TUOLUMNE COUNTY</b>							
1	TBD	11.75	WB	Yosemite Junction	CMS	Highway Advisory	Mid-term 5-7 yrs
2	TBD	29.784	WB	W/O Big Oak Flat	CMS	Highway Advisory	Long 8-10 yrs
<b>STATE ROUTE 120 MARIPOSA COUNTY</b>							
None							

The major challenge to ITS deployment is funding. ITS elements are proposed through the State Highway Operation Protection Program (SHOPP) with minimal funding for ITS deployment. Caltrans District 10 requests the installation of ITS elements on STIP projects, but more frequently than not, when project costs need to be reduced, ITS elements are the first to go. There needs to be more support from all project partners to promote and fund ITS elements on STIP projects.

Technology advances are also a challenge for ITS deployment. Technology is always changing, which makes it very difficult to integrate with existing technologies; and the lack of power and communication in remote areas impedes implementation in rural areas. ITS operating, utility, and maintenance expenses are costly along with high bandwidth communications for video. It is also a challenge to sustain the level of expertise that is needed to operate and maintain the equipment.

## 2.9.2 Detection

Detection is one of the most important components of ITS. Detection refers to the real-time measurement of transportation movements and conditions. In the past, measurements have been conducted periodically (such as once per year) and those measurements were used to determine the need for infrastructure expansion. Optimized corridor management strategies will require more accurate, on-going data collection that will be provided by detection systems placed throughout the corridor. Without detection systems, transportation agencies cannot implement advanced traffic control strategies, cannot inform the public about traffic conditions, expected delays and options, and cannot detect and react to incidents quickly enough to minimize the impacts created by those incidents. SR-120, within the limits of this TCR, does include sufficient detection, but there are some areas along the corridor that need system expansion to fully optimize these strategies. In addition, other types of improvement projects are typically planned to include detection units as part of their construction.

Caltrans District 10 requests traffic monitoring stations on a project by project basis depending on fund availability and type of work involved in the project. Some traffic monitors are linked to PeMS for use in distribution of data to many users. Table 2.9.2a lists the locations of PeMS elements currently existing on the SR-120 corridor in San Joaquin, Stanislaus, Tuolumne and Mariposa Counties. There are currently 25 PeMS stations and the majority of the stations are spaced approximately one quarter of a mile apart. There are 21 in San Joaquin County, two in Stanislaus County, two in Tuolumne County and none in Mariposa County.

**Table 2.9.2a: Existing Detection**

No.	Dir.	Postmile	Location Description
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>			
1	WB	R0.493	WB SR-120 N/O JCT SB I-5
2	WB	R0.544	WB SR-120 W/O JCT NB I-5
3	EB	R0.918	WB SR-120 E/O JCT NB I-5
4	WB	R1.273	WB SR-120 W/O Yosemite Ave.
5	WB	R1.766	WB SR-120 Wyche OH
6	WB	R2.258	WB SR-120 McKinley Ave. UC
7	WB	R2.713	WB SR-120 W/O Airport Way
8	WB	R3.338	WB SR-120 Airport Way OC
9	WB	R3.83	WB SR-120 W/O Union Ave.
10	EB	R4.117	EB SR-120 W/O Main St.
11	EB	R4.323	EB SR-120 Union Rd. OC
12	WB	R4.323	WB SR-120 Union Rd. OC

**Table 2.9.2a: Existing Detection Continued**

No.	Dir.	Postmile	Location Description
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY CONT.</b>			
13	WB	R4.55	WB SR-120 Union Ave
14	EB	R4.777	EB SR-120 W/O Main St.
15	WB	R4.777	WB SR-120 E/O Main St.
16	WB	R5.063	WB SR-120 W/O Main St.
17	EB	R5.310	EB SR-120 E/O Main St..
18	WB	R5.576	WB SR-120 E/O Main St.
19	EB	R6.06	EB SR-120 W/O Main St.
20	EB	21.18	EB SR-120 SJ/STA County Line
21	WB	21.18	WB SR-120 SJ/STA County Line
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>			
1	EB	7.2	EB SR-120 Deo Gloria Dr.
2	WB	7.2	WB SR-120 Deo Gloria Dr.
<b>STATE ROUTE 120 TUOLUMNE COUNTY</b>			
1	EB	11.7	EB SR-120 OByrnes Ferry Rd.
2	WB	11.7	WB SR-120 OByrnes Ferry Rd.
<b>STATE ROUTE 120 MARIPOSA COUNTY</b>			
None			



As shown in Table 2.9.2b there are currently 16 programmed PeMS stations on the SR-120 Corridor, all in San Joaquin County.

**Table 2.9.2b Programmed Detection**

No.	Dir.	Postmile	Location Description
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>			
1	WB	R1.27	On-ramp from Yosemite Ave.
2	EB	R1.28	Off-ramp to Yosemite Ave.
3	EB	R1.38	On-ramp from West Yosemite Ave.
4	WB	R1.38	Off-ramp to West Yosemite Ave.
5	EB	R3.25	Off-ramp to Airport Way
6	WB	R3.29	On-ramp from Airport Way
7	EB	R3.3	On-ramp from Airport Way
8	WB	R3.40	Off-ramp to Airport Way
9	EB	R4.25	Off-ramp to Union Ave.
10	WB	R4.26	On-ramp from Union Ave.
11	EB	R4.36	On-ramp from Union Ave.
12	WB	R4.53	Off-ramp to Union Ave.
13	EB	R5.23	Off-ramp to South Main St.
14	WB	R5.28	On-ramp to South Main St.
15	EB	R5.34	On-ramp from South Main St.
16	WB	R5.57	Off-ramp to South Main St.

Shown in Table 2.9.2c there are currently 30 Planned PeMS stations on the SR-120 Corridor. There are eight in San Joaquin County, 12 in Stanislaus County and ten in Tuolumne County.

**Table 2.9.2c: Planned Detection**

No.	Dir.	Postmile	Location Description
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>			
1	WB	R0.493	EB SR-120 E/O Mossdale, JCT I-5
2	WB	R0.493	WB SR-120 W/O Mossdale, JCT I-5
3	EB	T6.872	EB SR-120 W/O South JCT SR-99
4	WB	T6.872	WB SR-120 W/O South JCT SR-99
5	WB	8.84	EB SR-120 E/O Jack Tone Rd.
6	WB	8.84	WB SR-120 E/O Jack Tone Rd.
7	WB	8.84	EB SR-120 W/O Jack Tone Rd.
8	WB	8.84	WB SR-120 W/O Jack Tone Rd.
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>			
1	WB	3.16	EB SR-120 W/O Valley Home Rd.
2	EB	3.16	WB SR-120 W/O Valley Home Rd.
3	EB	4.346	EB SR-120 W/O Oakdale, A St.
4	WB	4.346	WB SR-120 W/O Oakdale, A St..
5	WB	4.346	EB SR-120 E/O Oakdale, A St..
6	EB	4.346	WB SR-120 E/O Oakdale, A St.
7	WB	5.116	EB SR-120 E/O Oakdale, West JCT SR-108
8	WB	5.116	WB SR-120 E/O Oakdale, West JCT SR-108
9	EB	5.116	EB SR-120 W/O Oakdale, West JCT SR-108
10	WB	5.116	WB SR-120 W/O Oakdale, West JCT SR-108
11	EB	12.077	EB SR-120 E/O East JCT SR-108
12	EB	12.077	WB SR-120 E/O East JCT SR-108

**Table 2.9.2c: Planned Detection Continued**

No.	Dir.	Postmile	Location Description
<b>STATE ROUTE 120 TUOLUMNE COUNTY</b>			
1	WB	15.516	EB SR-120 E/O Chinese Camp, North JCT SR-49
2	EB	15.516	WB SR-120 E/O Chinese Camp, North JCT SR-49
3	WB	R23.897	EB SR-120 E/O South JCT SR-49
4	EB	R23.897	WB SR-120 E/O South JCT SR-49
5	WB	R23.897	EB SR-120 W/O South JCT SR-49
6	WB	R23.897	WB SR-120 W/O South JCT SR-49
7	EB	R38.900	EB SR-120 E/O Hells Hollow Rd.
8	WB	R38.900	WB SR-120 E/O Hells Hollow Rd.
9	EB	R56.150	EB SR-120 W/O Yosemite National Park (West Boundary)
10	WB	R56.150	WB SR-120 W/O Yosemite National Park (West Boundary)
<b>STATE ROUTE 120 MARIPOSA COUNTY</b>			
<b>None</b>			

On the following page is: Figure 2.9 ITS Elements on SR-120.

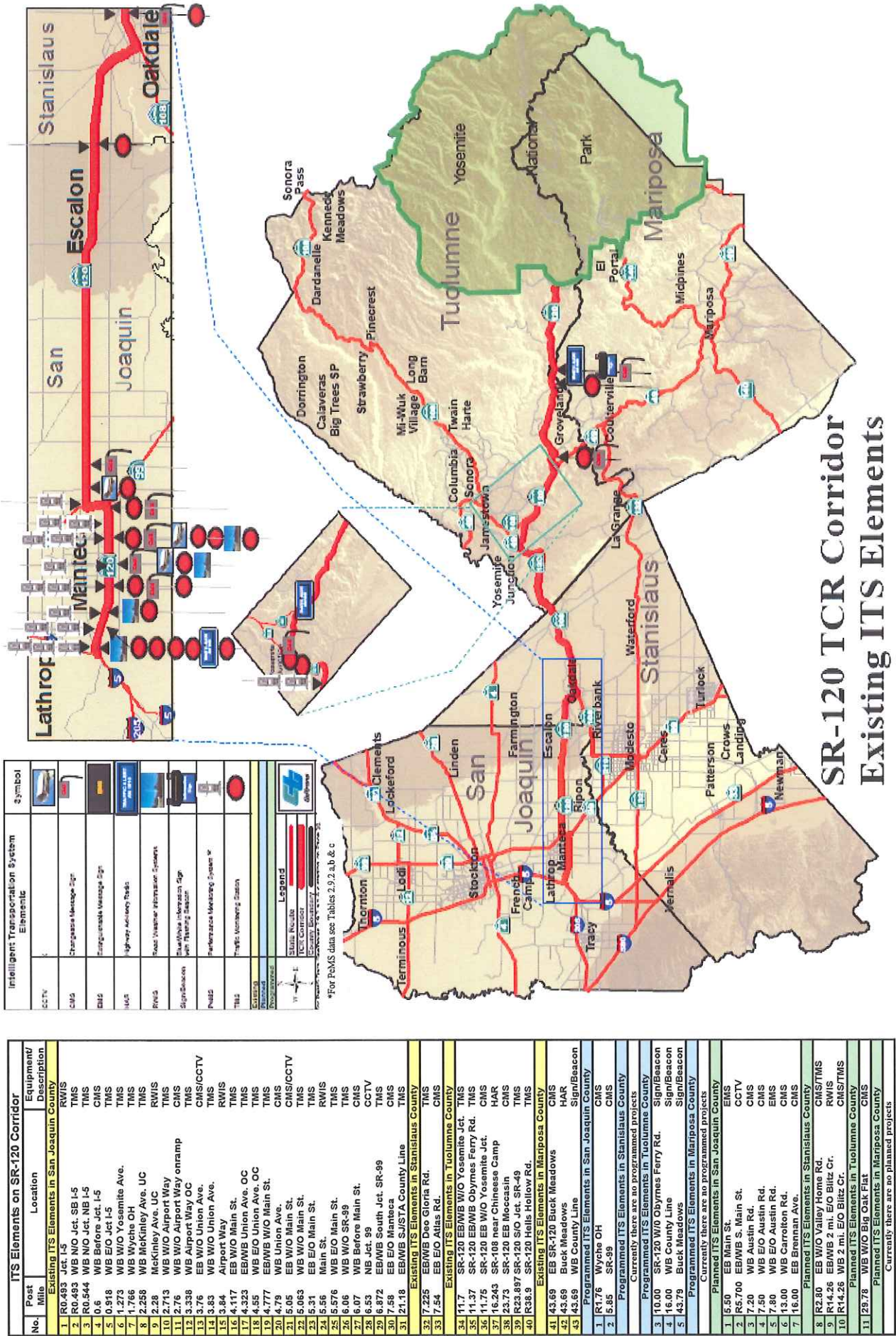


Figure 2.9 ITS Elements on SR-120



### 2.9.3 Transportation Management Centers

Effective ITS implementation requires coordination of all components. The TMC plays an important role in day-to-day system management, providing coordinated incident responses, as well as integration of various systems. An example of integration would be the coordination of ramp metering and arterial signal management. Traveler information also requires sharing data with public and private partners. Within San Joaquin County, Caltrans District 10, the City of Stockton, the CHP, and the media play different roles in incident management. The Caltrans District 10 TMC and the City of Stockton TMC while separate systems, integrate these roles and systems in central locations to optimize performance.

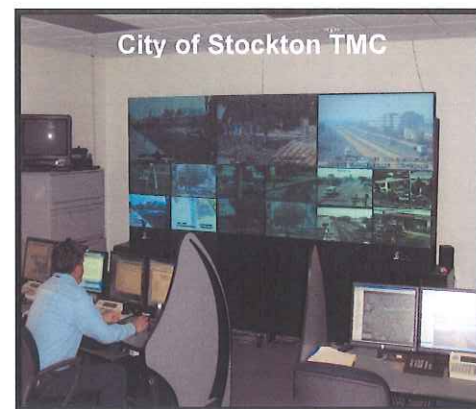
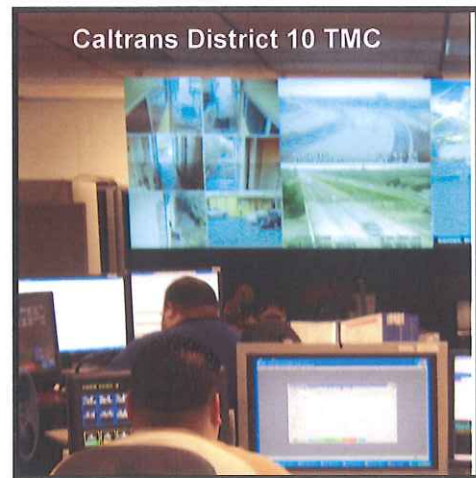
The City of Modesto has an Advanced Traffic Management System that has been operating for over 12 years. It has a number of functions which includes communication with all of the traffic signals in the City of Modesto and there are 28 CCTVs in the city. Signal timing can be changed at the center and even from a modem at a City traffic engineer's home to make adjustments. It has the capability to communicate with the Caltrans TMC, but it hasn't been set up at this point.

TMCs are used in emergencies, Amber Alerts, and provide an Emergency Operations Center function during natural disasters, such as earthquakes.

TMCs also serve a security preparedness function; staff can monitor the urban freeway system, quickly activate response strategies (such as CMS), or notify the proper authorities when security risks are identified.

### 2.9.4 Traffic Control

Another element of ITS is traffic control. Traffic control includes signal strategies for managing traffic flows on arterials as well as metering ramps on to the freeway system. These strategies offer great promise to improve the productivity of the transportation system. There are, however, challenges for the State in utilizing some of these options. Local agencies are often concerned that traffic control devices will cause additional traffic to use local streets as an



alternative. This is an area where Caltrans is working with its local partners to reach a solution that will be agreeable to all parties.

### **2.9.5 Incident Management**

Incident Management is a significant component of ITS. Most studies in the United States suggest that incidents such as accidents, special events, and severe weather conditions are responsible for about half of the delay on our freeway system. Motorists are accustomed to normal delays. However, traffic incidents disrupt the motorist's normal routine, creating unplanned delays. This can create a negative impact to the traveling public. Unanticipated delays may also create frustration and aggressive driving. Such aggressive behavior poses a danger not only to other motorists but also to emergency response and law enforcement personnel. The goal of effective Traffic Incident Management (TIM) is to reduce the time it takes to clear traffic incidents from the roadway. The less time it takes to clear an incident, the less congestion and delay the motorist experiences. Safety for both the emergency response personnel and the traveling public is improved. Even small improvements in this process can yield significant benefits.

Effective TIM relies on advanced technologies to allow for expedited incident detection, verification, coordination among necessary emergency response agencies, and the subsequent clearance of the incident as rapidly as possible.

### **2.9.6 Advanced Traveler Information Systems**

One of the more progressive components of ITS is the Advanced Travel Information Systems (ATIS). Most commuters get information about traffic conditions from the media such as radio and television stations. ATIS will provide modal-specific, time-of-day demand data that will allow travelers to get the most out of the transportation system. The system would allow travelers to manage their trips in the most efficient manner. Implementing advanced traveler information systems requires a partnership between transportation agencies and the public. However, it is clear that the framework is not yet fully developed and that, at this time, current detection systems are not adequate for real-time, tailored information.

Logical phasing for implementing the components of an effective Transportation Management System would be:

- a) Installing simple, adaptive-scheme ramp metering;
- b) Optimizing the meter rates;
- c) Implementing a corridor adaptive ramp-metering scheme;
- d) Advanced arterial signal actuation strategies and improved incident management; and
- e) With all of these in place, a comprehensive traveler information system would be the final goal.

Monitoring and evaluation is the foundation for sound management of the corridor to identify the optimum strategies to improve the transportation corridor. Strategies range from system

maintenance and preservation to expansion, but focus on optimization of the existing system by fully incorporating operational strategies into the management plan. Implementation of ITS strategies will complement other improvements, including transit, light rail, and improvements on the local road system. The goal is that the transportation system, as a whole, including highways, local roads, and alternative modes of transportation, operate as one seamless network.

## **2.10 Transportation Demand Management**

Transportation Demand Management (TDM) is designed to reduce vehicle trips during peak hours. TDM is specifically targeted at work force commuters who generate the majority of peak hour traffic. Strategies include:

- a) Rideshare programs
- b) Transit usage
- c) Flex hours
- d) Vanpools
- e) Bicycling and walking
- f) Telecommuting
- g) Mixed land use and jobs/housing balance

Incorporating these strategies would be part of land use decisions, the prerogative of local government. TDM programs could be required by local jurisdictions for any large commercial or office project and could be tied to incentives of some sort to encourage the development of such programs.

### **2.10.1 Rideshare Programs**

SJCOG administers a rideshare program known as Commute Connection for San Joaquin and Stanislaus Counties. This rideshare program includes carpool matching, vanpool matching and assistance, media promotion of ridesharing, distribution of brochures at employment sites and other locations as necessary, program monitoring and recording, public education, and community outreach. Tuolumne County is part of the Foothill Rideshare program which serves Amador, Calaveras and Tuolumne Counties. Mariposa is part of the Mercedrides.com rideshare program which serves both Merced and Mariposa Counties.

## **2.11 Land Use**

Recent years have seen a marked increase in population growth (over 60 percent growth since 1980) and travel by both local and out of area commuters on the roads in San Joaquin County. As the fastest growing region in the SJV, the population within San Joaquin County is expected to reach 1.7 million people by the year 2050 (SJCOG Regional Expressway Study 2008).

A meaningful trend is suggested by the declining ratio of San Joaquin County residents employed in San Joaquin County. The 2008 American Community Survey (US Census Bureau) indicated that only 75 percent of San Joaquin County's labor force worked within San Joaquin County, as opposed to about 83 percent in 1990. In addition, the length of the average commute increased from 22 minutes in 1990 to 29 minutes in 2000. Since a large share of the proposed

growth in the local housing supply is concentrated in the southwest county, the proportion of locally employed residents may continue to drop in the short term (SJCOG RTP 2011).

According to the SJCOG Park and Ride Plan, Central Manteca is expected to experience substantial growth. In Stanislaus County, according to the 2007 StanCOG RTP, the Stanislaus County regional population is expected to add 370,000 people by 2030, an increase of 84 percent. Projected increases in highway congestion and population growth will play a major role in the need for emphasizing alternative modes of travel between the San Joaquin Valley and the Bay Area. Existing land use development patterns are beginning to seriously affect the quality of life in Stanislaus County. The results are congestion and air pollution from an increased use of motor vehicles, the need for costly improvements to roads and public services, the loss of open space and the loss of a sense of community. With pressures from growth and intensified land use, street and highway improvements, as well as public transit expansion will need to be implemented to accommodate trips generated by newly proposed developments.

Long term planning and coordination amongst local governments and innovative solutions will be needed to keep transportation viable. Caltrans has provided a planning grant to the Merced County Association of Governments (MCAG) on behalf of the eight SJV regional planning agencies to develop a Regional Blueprint Planning Program intended to better inform regional and local decision-making, through pro-active engagement of all segments of the population as well as critical stakeholders in the community, business interests, academia, builders, environmental advocates, and to foster consensus on a vision and preferred land use pattern. It is anticipated that the regional blueprint planning grants will build capacity for regional collaboration and integrated planning that will in turn enable regions to plan to accommodate all their future growth, thereby reducing need for sprawl.

The east-west expressway North County Corridor currently programmed in the project approval and environmental document (PA&ED) phase is expected to accommodate planned growth in the area. The new alignment facility will provide connectivity to SR-99, SR-219, SR-108 and SR-120 and separate regional traffic from local traffic providing operational benefits to the cities of Modesto, Riverbank, Oakdale, in Stanislaus County. The corridor extends through the Salida Community Plan area from the SR-99/Hammett Road interchange to east of the City of Oakdale. This project proposes approximately 24 miles of new expressway.

Table 2.11 provides the existing and planned significant developments adjacent to SR-120. Figure 2.11 provides a map of the developments within San Joaquin, Stanislaus, Tuolumne and Mariposa Counties, including the projects adjacent to SR-120.

**Table 2.11: Developments Adjacent to SR-120**

Development	Location	Acres	Units
STATE ROUTE 120 SAN JOAQUIN COUNTY			
Archtown Industrial Project	South West Corner of Arch Rd. and New Castle near SR-99	n/a	1,401, 760 s.f.
Northern California Re-entry Facility	Arch Rd. and SR-99	134	1,133 beds



**Table 2.11: Developments Adjacent to SR-120 Continued**

<b>Development</b>	<b>Location</b>	<b>Acres</b>	<b>Units</b>
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>			
The Preserve – Mixed Residential	Near I-5 between Hammer Lane and Eight Mile Rd.	360	1,404 mixed residential units
Opus Logistics Center	Arch Rd. and SR-99	n/a	Phase 1: 6,337,980 s.f. Phase 2: 3,223,440 s.f.
Arch Road Industrial	South East Corner of Arch Rd. and New Castle near SR-99	n/a	1,241,000 s.f.
Harlan Rd. North Project	City of Lathrop between Louise Ave. & SR-120	18.7	382,271 s.f.
Union Crossing	South of SR-120 and 2 miles west of SR-99	48.5	450,000 s.f.
Stadium Center	North of SR-120 at SE corner of Daniels St. & S. Airport Way	16	202,589 s.f.
Evans Estates/Pillsbury Estates	S. of Manteca S. Manteca Rd./Woodward Ave. & Pillsbury Rd.	240	861 d.u.
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>			
River Oak Grace Church	7712 Rodden Rd., Oakdale	23+	69,000 s.f.
Twin Cypress Mobile Home Park	16300 Orange Blossom Rd. Knights Ferry	10.49	45 d.u.
Oakdale Town Homes	780, 800, and 860 North Yosemite Blvd., Oakdale	12.05	28 d.u.
<b>STATE ROUTE 120 TUOLUMNE COUNTY</b>			
Big Oak Flat Village Center	17867 SR 120 and 17790 Harper Rd., Big Oak Flat	39.4	65,400 s.f.*
Yosemite Cattle Ranch	24025 SR 120, Groveland	149+	18,500 s.f.
<b>STATE ROUTE 120 MARIPOSA COUNTY</b>			
None			

Conditions of Approval for the Big Oak Flat Village Center included in Table 2.11 included the construction of a westbound left-turn lane on SR-120 at the intersection of the project driveway in accordance with the plans approved. In addition, Traffic Impact Mitigation Fees (TIMF) will fund other improvements on SR-120.



# Major Development SR-120 TCR Corridor August 2009

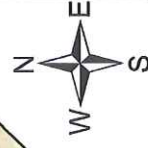
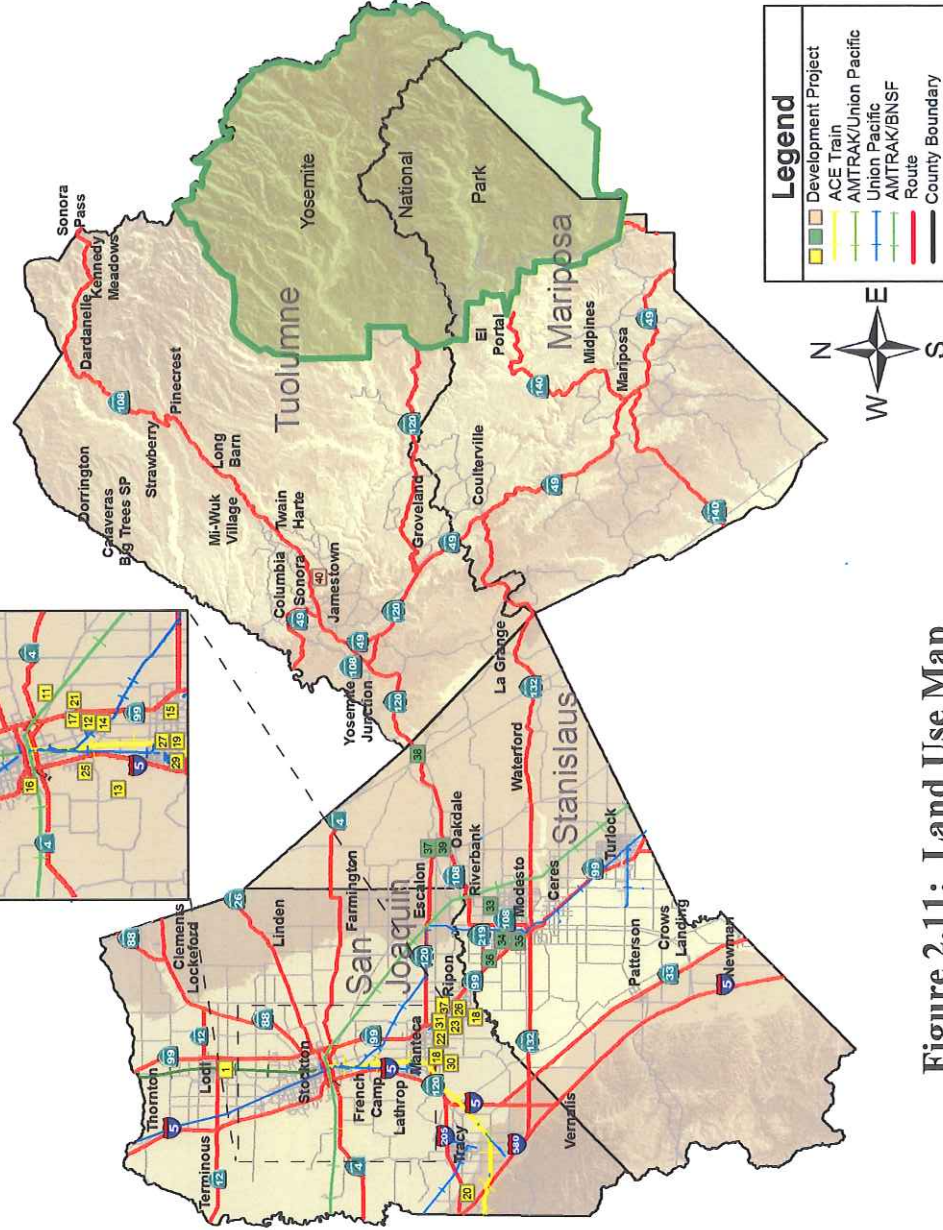


Figure 2.11: Land Use Map

## Major Development on SR-120 Corridor

SAN JOAQUIN COUNTY		
1	Reynolds Ranch	1,200 DU #550,000 Com./Ind. Sq. Ft.
2	Spanos Gateway/Thompson	10,446 DU
3	Crystal Bay/Westlake	4,000 DU
4	Sanctuary	7,000 DU
5	Bear Creek East/West	8,861 DU
6	Cannery Park	1,300 DU
7	North Stockton	4,967 DU
8	Empire Ranch	2,121 DU
9	Origene Ranch	1,500 DU
10	Oakmoore Gateway	2,500 DU
11	Mariposa Lakes	10,200 DU, 20,000,000 Com./Ind. Sq. Ft.
12	Tidewater Crossing	2,492 DU, 17,000,000 Com./Ind. Sq. Ft.
13	River Run	10,500 DU
14	French Camp	3,500 DU
15	North Main Commercial	1,600,000 Com./Ind. Sq. Ft.
16	Port of Stockton	1,000 acres of Industrial Sq. Ft.
17	Stockton Metropolitan Airport	2007 Import 2,403,219 Metric Tons
18	Promenade Center	Export 419,249 Metric Tons
19	Field of Dreams Recreation Area	Export 20,000 Metric Tons
20	Cross Roads Distribution Center	Export 20,000 Metric Tons
STANISLAUS COUNTY		
21	California Health Care Facility	142.2 acres, Hospital 1300-1800 beds for prison inmates
22	Union Crossing	455,000 Com. Sq. Ft.
23	Evans/Pillsbury Estates	240 acres, 861 DU
24	Wilcox Business Park	20 acres Com.
25	Marketplace at Weston Ranch	20 acres, 57,069 Com. Sq. Ft., 102 Apartment DU
26	Austin Industrial	433,067 Comm. Sq. Ft.
27	Harlan Rd. North Project	18.7 acres, 382,271 Sq. Ft.
28	Stadium Center	16 acres, 202,589 Sq. Ft.
29	Manteca Retail	10.68 acres, 100,000 Sq. Ft.
30	Gateway Storage of Manteca	13.95 acres, 170,000 Sq. Ft.
31	Tesoro Apartments	15,37 acres, 300 DU
32	J.M. Equipment	4 acres, 30,000 Sq. Ft.
TUOLUMNE COUNTY		
33	Tivoli	3,200 DU
34	Kaiser Medical Center	1,425,000 Sq. Ft.
35	Kansas Woodland Business Park	107,000 Comm. Sq. Ft.
36	Crows Landing	1,000 acres of Industrial Sq. Ft.
37	Pelandale Commercial	2007 Import 2,403,219 Metric Tons
38	River Oak Grace Church	Export 419,249 Metric Tons
39	Twin Cypress Mobile Home Park	Export 20,000 Metric Tons
40	Oakdale Town Homes	28 DU
MARIPOSA COUNTY		
41	Field of Dreams Recreation Area	34 Acres, 500,000 Com. Sq. Ft. Two Hotels
42	Cross Roads Distribution Center	1,100,000 Industrial Sq. Ft.

Altamont Commuter Express (ACE):  
Passenger Ridership (2008): 864,617  
Amtrak:  
Passenger Ridership (2008): 974,055  
Burlington Northern and Santa Fe (BNSF)  
5-10 Million Gross Tons Commodities Annually  
Union Pacific (UP)  
10-25 Million Gross Tons Commodities Annually

## 2.12 Environmental Scan

A scan of potential environmental impacts has been completed along the TCR corridor. The scan reveals that there is no flood plain issues located in San Joaquin County along SR-120. There is a moderate to low degree of impact to wetlands and special status species. There is a moderate to high degree of impact to cultural resources. There is a high degree of impact from leaking underground tanks from the junction of SR-99 to Austin Road and again between Brennan Road to Harrold Avenue in Escalon, and moderate degree of impact between French Camp Road to Brennan Road. Hazardous waste is of moderate degree of impact between I-5 and SR-99. San Joaquin County is non-attainment for the 8 hr/1hr ozone standard, is non-attainment for Particulate Matter 2.5, in attainment/maintenance for PM10 and Carbon monoxide.

There are 100 year flood plain issues in Stanislaus County at Valley Home Road to the junction with SR-108, along the Stanislaus River. There is a moderate degree of impact to wetlands between the San Joaquin County line to the Junction with SR-108. There is a high degree of impact to wetlands between approximately 0.2 miles east of Lancaster Road to the Tuolumne County Line. There is a moderate degree of impact to special status species between approximately 600 feet east of 26 Mile Road to the Junction with SR-108, and between Maag to approximately 0.87 miles east of Wamble Road. There is a high degree of special status species between approximately 0.2 miles east of Lancaster Road to Tuolumne County Line. There is a moderate degree of impact to cultural resources between the San Joaquin County Line to approximately 600 ft. east of 26 Mile Road, and between the Junction of SR-108 and 0.87 miles east of Wamble Road. There is a high degree of impact to cultural resources between approximately 600 feet east of 26 Mile Road to the Junction of SR-108. There is a high degree of impact to cultural resources between 0.87 miles east of Wamble Road to approximately 0.2 miles east of Lancaster Road. There is a high degree of impact to cultural resources between 0.2 miles east of Lancaster Road and the Tuolumne County Line. There is a high degree of impact of leaking underground tanks between the Junction of SR-108 to Maag Road. There is a moderate degree of impact of leaking underground tanks between the Stanislaus River and the Junction with SR-108. Stanislaus County is non-attainment for the 8hr/1hr ozone standards, is non-attainment for PM2.5, and maintenance/attainment for PM10 and carbon monoxide.

A 100 year flood plain is present in Tuolumne County between Montezuma Road to North Junction. SR-49 to South Junction SR-49 at Lake Don Pedro bridge. Wetland and special status species are of a high degree of impact between Stanislaus County Line to Green Springs Road and between the Mariposa County Line to Yosemite National Park. Special status species and cultural resources are of moderate degree of impact between Green Springs Road to Wards Ferry/Big Oak Road, except that for the wetlands portion between South Junction SR-49 to Wards Ferry/Big Oak Roads is of low degree of impact. Special status species and cultural resources are of moderate degree of impact between Ferretti Road in Groveland to the Tuolumne/Mariposa County Line. Cultural resources are of a high degree of impact throughout the SR-120 corridor in Tuolumne County. Leaking underground tanks are of moderate degree of impact between South Junction SR-49 to Ferretti Road in Groveland. Possible hazardous waste and naturally occurring asbestos is of low degree of impact in Tuolumne County throughout the SR-120 corridor. Tuolumne County is non-attainment for the 8 hour ozone standard, and is unclassified for PM10 and PM2.5. It is attainment for carbon monoxide.



Mariposa County through Buck Meadows is not in a flood zone. Wetlands and special status species are of moderate degree of impact. Cultural resources are of a high degree of impact. Mariposa County is non-attainment for the 8 hour ozone standard and is unclassified for PM10 and PM2.5, and is attainment for carbon monoxide.

**Table.: 2.12 Environmental Scan**

Seg	Post Mile	Description	Flood Plains	Wetlands	Special Status Species	Cultural Resources	Leaking Under-ground Tanks	Possible Hazardous Waste	Air Quality				
									Ozone	Particulate Matter	Carbon Monoxide		
STATE ROUTE 120 SAN JOAQUIN COUNTY													
1	00.00-06.87	Jct. I-5 to Jct. SR-99 south	N/A	moderate	moderate	high	low	mod	Non-attainment	PM2.5 Non-attainment	PM10 Maintenance/Attainment	Maintenance/Attainment	
2	06.20-06.83	Jct. SR-99 south to Austin Road				high	low						
3	06.83-11.64	Austin Road to French Camp Road				low							
4	11.64-15.86	French Camp Road to Brennan Road		mod	low								
5	15.86-18.69	Brennan Road to Harrold Avenue in Escalon		high									
6	18.69-21.18	Harrold Avenue in Escalon to Stanislaus County Line		low									
STATE ROUTE 120 STANISLAUS COUNTY													
1	00.00-03.46	San Joaquin County Line to approximately 600 ft. east of 26 Mile Road	N/A	moderate	low	moderate	low	low	Non-attainment	PM2.5 Non-attainment	PM10 Maintenance/Attainment	Maintenance/Attainment	
2	03.46-04.26	Approximately 600 feet east of 26 Mile Road to Stanislaus River	100 yr @ Stanislaus River		moderate	high							
3	04.26-05.12	Stanislaus River to Jct. SR-108			moderate	moderate							
4	05.12-06.04	Jct. SR-108 to Maag	N/A	low	low	moderate	high						low
5	06.04-10.11	Maag to approximately 0.87 miles east of Wamble Road.			moderate	high							
6	10.11-11.63	0.87 miles east of Wamble Road to approximately 0.2 miles east of Lancaster Road			low								
7	11.63-18.16	Approximately 0.2 miles east of Lancaster Road to Tuolumne County Line			high	high							

**Table.: 2.12 Environmental Scan Continued**

Seg..	Postmile	Description	Flood Plains	Wetlands	Special Status Species	Cultural Resources	Leaking Under-ground Tanks	Possible Hazardous Waste	Air Quality			
									Ozone	Particulate Matter	Carbon Monoxide	
STATE ROUTE 120 TUOLUMNE COUNTY												
1	00.00-07.21	Stanislaus County Line to Green Springs Road	N/A	high	high	high	low	low	Non-attainment 8 hr. Ozone Standard	Unclassified PM10 & PM2.5	Attainment	
2	07.21-12.08	Green Springs Road to East Jct. SR-108		moderate	moderate			low				Low Hazardous Waste & Low Naturally Occurring Asbestos
3	12.08-15.52	East Jct. SR-108 to Montezuma Road, North Jct. SR-49										
4	15.52-23.90	Montezuma Road, N. Jct. SR-49 to South Jct. SR-49	100 yr @ Lake Don Pedro Bridge	low	low		moderate	low				
5	23.90-30.32	South Jct. SR-49 to Wards Ferry /Big Oak Roads	N/A									
6	30.32-32.55	Wards Ferry /Big Oak Roads to Ferretti Road in Groveland										
7	32.55-38.90	Ferretti Road in Groveland to Hells Hollow Road	moderate	moderate	low		low					
8	38.90-41.52	Hells Hollow Road to Mariposa County Line						N/A				
9	41.52-43.75	Tuolumne County Line (west) to Tuolumne County Line (east)										
10	43.75-56.51	Mariposa County Line to Yosemite National Park	high	high								
STATE ROUTE 120 MARIPOSA COUNTY												
1	41.52-43.75	Tuolumne County Line (west) to Tuolumne County Line (east)	N/A	moderate	moderate	high	low	low	Non-attainment 8 hr Ozone Standard	Unclassified PM10 & PM2.5	Attainment	

The NEPA and CEQA and other related federal and State environmental laws and regulations require environmental studies and public participation for all projects for which a public agency has a discretionary action. Resources and issues requiring environmental study may include historical structures, protected animals and plants, social and economic impacts, wildlife refuges and public parks, archaeological sites, hazardous waste, paleontological sites, air and water quality, and noise.

Appropriate environmental studies would need to be conducted whenever any of the SR-120 TCR improvements proposed are implemented if State or federal funding is involved. Project level analysis may be required and depending on the funding source may involve compliance with NEPA and/or CEQA.

Projects that may potentially cause an increase in traffic may require air quality and noise impact studies to determine if effects of increased traffic would cause a significant reduction of air quality and/or substantial increase in noise level. Hazardous waste studies may be indicated if the project area would include gas stations or other businesses that use or generate potential hazardous waste.

### **2.12.1 Title VI and Environmental Justice**

Title VI of the Civil Rights Act of 1964 set a standard that authoritatively outlawed discrimination in the conduct of all federal activities. It reads as follows: “No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Although considerable progress has been made during the 1990s, individuals both inside and outside government are troubled by the high and adverse environmental impacts of private or governmental actions that fall disproportionately on populations protected by laws such as the Civil Rights Act. The California Department of Transportation Title VI Program coordinates and implements federal requirements to ensure the transportation planning program is in compliance with those requirements.

The term “environmental justice” was created by people concerned that everyone within the United States deserves equal protection under the country’s laws. Executive Order 12898 issued in 1994, responded to this concern by organizing and explaining in detail the federal government’s commitment to promote environmental justice. Each Federal agency was directed to review its procedures and to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on minority and low-income populations. The California Department of Transportation Environmental Justice Program promotes context sensitive planning and interdisciplinary effort to addressing the interests and concerns of low-income and minority populations in transportation planning and project development. The effort includes reaching out to low income and minority communities; identifying and engaging underrepresented communities early in transportation planning and developing information, data, analytic tools, and educational workshops.

### **2.12.2 Importance of TCRs for Sustaining the Environment**

TCRs will complement an effective response to implementation of Assembly Bill 32, Senate Bill 375, Regional Blueprints, the Smart Mobility Framework, Complete Streets and Context Sensitive Solutions. Summarized below are major areas where they will add value.

AB-32 – California Global Warming Solutions Act of 2006. AB 32 requires the State Air Resources Board (ARB) to adopt a statewide greenhouse gas emission limit equivalent to the statewide greenhouse gas emission levels in 1990 to be achieved by 2016. Effective system management will smooth speeds to reduce or ultimately eliminate the “stop/start” and slowing conditions experienced by motorists on the freeway. This will reduce emission rates of pollutants caused by congestion.

SB 375 – This new law supports compliance with AB 32. The law is complex and places responsibilities primarily on the MPOs. The law requires the MPOs to prepare a Sustainable Communities Strategy (SCS) that among multiple other considerations set forth a forecasted development pattern for the region, which when integrated with the transportation network, and other transportation measures and policies, will reduce greenhouse gas emissions. CSMPs will contribute to the development of the SCS and as applicable the alternative planning strategy by providing information on the most effective projects, strategies, and actions to restore throughput thus reducing emissions.

California Regional Blueprint Planning Program – Regional blueprint planning is a critical tool for implementing the Governor’s Strategic Growth Plan to build the infrastructure needed to accommodate California’s future growth, reduce congestion and support economic vitality. It can lead to more transportation and housing choices so that Californians have options to walk, bicycle, or take transit to reduce green house gases while sustaining air quality, equitable transportation and housing choices, vibrant communities, and the environment.

Smart Mobility Framework – This project is an innovative effort to develop a measurement framework based on best practices across California and the nation. It will create an evaluation framework to assess how well plans, proposals, or projects meet principles of Smart Mobility. The projects, strategies, and actions in the TCRs and CSMPs will be reviewed for effectiveness based on these principles.

Complete Streets – Instituting a complete streets policy in the State of California ensures that transportation agencies routinely design and operate the entire right of way to enable safe access for drivers, transit users and vehicles, pedestrians, and bicyclists, as well as for older people, children, and people with disabilities.

## **Section 3 Performance Management and Maintenance Assessment**

The following preliminary performance assessment is based on existing data from various sources. It evaluates existing and projected traffic volumes to determine existing and future LOS on SR-120 and its connecting highways, and identifies the Concept Facility needed for the 20 year planning horizon to operate at Concept LOS “C” in rural areas and “D” in urban areas. It



identifies the programmed and planned ITS, operations, maintenance, and capacity increasing projects that are currently identified in programming and planning documents within San Joaquin, Stanislaus, Tuolumne and Mariposa Counties. It also identifies existing and future corridor management strategies.

### 3.1 Traffic Volumes

The 2007 AADT on SR-120 ranged from 3,000 to 67,800 with trucks constituting up to 15 percent of the ADT in some sections. It is projected that by 2030 AADT will be up to 106,000 at the most western end of the corridor within San Joaquin County.

In San Joaquin County, in 2007 the AADT on SR-120 ranges from 11,800 to 67,800 with the highest peak hour percentage at 12 percent. In Stanislaus County the AADT on SR-120 ranges from 12,837 and 22,600 with the highest peak hour percentage at 12 percent. In Tuolumne County, the AADT on SR-120 ranges from 3,000 to 16,100 with the highest peak hour percentage at 29 percent. In Mariposa County, the AADT on SR-120 at Bucks Meadows averages 3,700 with the peak hour estimated at 29 percent. Traffic volumes are in Table 3.1. Volumes are unconstrained and NCC volumes are not factored in the future forecasts.

**Table 3.1: Traffic Volumes**

SR-120 Post Mile	Description	2007 AADT	2015 AADT	2030 AADT	2007 Peak Hour Volume	2015 Peak Hour Volume	2030 Peak Hour Volume	Truck Volume (2007)	5+ Axle Truck Volume (2007)	Truck Volume Peak Hour %	Truck Volume % of Total ADT
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>											
00.00/ T6.872	Junction I-5 to SR-99	67,800	78,600	106,000	5,400	7,450	10,100	9,200	2,300	11.0	14.0
R6.2/ T6.83	Junction SR-99 S. to Austin Rd.	16,400	19,000	23,900	1,600	1,900	2,410	2,400	2,300	11.0	15.0
T6.83/ 11.64	Austin Rd. To French Camp Rd.	11,800	13,700	17,200	1,300	1,790	2,440	2,400	1,500	11.0	14.0
11.64/ 15.86	French Camp Rd. to Brennan Rd.	12,400	15,400	21,000	1,400	1,930	2,630	2,400	1,500	9.0	12.0
15.86/ 18.69	Brennan Rd. to Harrold Ave. in Escalon	12,500	15,500	21,100	1,300	1,790	2,440	2,400	1,500	8.0	11.0
18.69/ 21.18	Harrold Ave. in Escalon to Stanislaus County Line	12,100	15,000	20,400	1,500	2,070	2,820	2,400	1,500	8.0	10.0
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>											
0.00/ 3.46	San Joaquin County Line to Valley Home Rd.	12,837	15,772	21,241	1,587	2,006	2,622	1,173	704	15.0	9.0
3.46/ 4.26	Valley Home Rd. to Stanislaus River	20,600	23,900	30,100	2,500	3,125	3,905	3,000	1,800	11.0	15.0
4.26/ 5.12	Stanislaus River to Junction SR-108	20,700	25,700	35,000	2,500	3,100	4,200	2,700	1,700	10.0	13.0

**Table 3.1: Traffic Volumes Continued**

SR-120 Post Mile	Description	2007 AADT	2015 AADT	2030 AADT	2007 Peak Hour Volume	2015 Peak Hour Volume	2030 Peak Hour Volume	Truck Volume (2007)	5+ Axle Truck Volume (2007)	Truck Volume Peak Hour %	Truck Volume % of Total AADT
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>											
5.12/ 6.04	Junction SR-120/SR-108 to Maag	22,600	28,000	38,200	2,300	2,785	3,750	1,600	1,020	5.0	7.0
6.04/ 10.11	Maag to 0.87 mi. E. of Wamble Rd..	17,203	21,312	29,052	1,877	2,246	3,085	1,600	669	7.0	9.0
10.11/ 11.63	Orange Blossom Rd. to 2 mi. E. of Lancaster Rd.	12,700	15,700	21,500	1,600	1,900	2,600	1,600	600	8.0	10.0
11.63/ T18.16	Two mi. E. of Lancaster Rd. to Tuolumne County Line	12,461	14,684	19,410	1,660	2,079	2,779	1,660	481	8.0	11.0
<b>STATE ROUTE 120 TUOLUMNE COUNTY</b>											
R0.00/ T6.96	From Stanislaus County Line to 0.25 mi. W. of Green Springs Rd. to Yosemite Junction	13,300	15,400	19,400	2,000	2,300	2,800	1,700	400	8.0	11.0
T6.96/ 12.07	From 0.25 mi. W. of Green Springs Rd. to Yosemite Junction	16,100	17,900	21,200	2,131	2,275	2,700	1,700	400	8.0	10.0
12.07/ 15.52	E. Junction SR-108 to Montezuma Rd., N. Junction SR-49	3,000	3,400	4,380	500	600	700	260	100	5.0	7.0
15.52/ 23.90	Montezuma Rd. N. Junction SR-49 to S. Junction SR-49	4,700	5,500	6,900	670	780	1,070	250	100	4.0	6.0
23.90/ 30.32	S. Junction SR-49 to Wards Ferry Rd./Big Oaks Rd.	5,000	5,900	7,250	630	720	900	200	60	4.0	5.0
30.32/ 32.55	Wards Ferry/Big Oaks Rd. to Ferretti Rd. in Groveland	6,600	7,700	9,600	900	1,100	1,300	200	85	2.0	3.0
32.55/ R38.90	Ferretti Rd. in Groveland to Hells Hollow Rd.	4,600	5,300	6,700	1,200	1,400	1,700	200	85	3.0	4.0
R38.90/ R41.52	Hells Hollow Rd. to Mariposa County Line	3,800	4,400	5,500	1,100	1,300	1,600	200	85	3.0	4.0
R41.52/ R43.75	Tuolumne County Line to Tuolumne County Line	3,700	4,300	5,400	1,100	1,300	1,600	200	85	3.0	4.0
R43.75/ R56.51	Mariposa County Line to Yosemite National Park	3,500	4,100	5,100	1,000	1,200	1,500	200	85	2.0	3.0
<b>STATE ROUTE 120 MARIPOSA COUNTY</b>											
R41.52/ R43.75	Tuolumne County Line to Tuolumne County Line	3,700	4,600	6,300	1,100	1,300	1,800	100	10	2.0	3.0

### 3.1.1 Truck Volumes

In San Joaquin County, truck volumes are expected to range between 2,400 and 9,200 with the highest percentage at 15 percent of the total ADT. In Stanislaus County, truck volumes are expected to range between 1,173 and 3,000 with the highest percentage at 15 percent of the total ADT. In Tuolumne County, truck volumes are expected to range between 200 and 1,700 with the highest percentage at 11 percent of the total ADT. In Mariposa County the truck volume is 100 per day with the truck volume percentage at 10 percent.

Based on 2007 volumes, SR-120 experienced the highest truck volumes of 9,200 in San Joaquin County from the portion between I-5 and SR-99 which includes 2,300 five-plus axle trucks. The 2007 truck volume peak hour percentage through the segment was 11.0 percent, and truck volume of total ADT represented 14.0 percent. Refer to Table 3.1 for additional information regarding truck volumes on the SR-120 corridor.

### 3.2 Level of Service

Based on 2007 volumes, 33.27 miles of the 96.822 mile corridor are currently operating at acceptable LOS, with 63.552 miles operating at deficient LOS. In San Joaquin County, based on 2007 volumes 18.392 miles out of 21.852 miles do not meet the concept LOS. In Stanislaus County, 16.68 miles out of 18.46 miles do not meet the concept LOS. Through the City of Oakdale, LOS does not reflect signalized and unsignalized intersections and driveways. In Tuolumne County 26.25 miles out of 54.28 miles do not meet the concept LOS. In 2015 and 2030 28.48 miles out of 54.28 miles are projected not to meet the concept LOS. In Mariposa County the 2.23 miles of SR-120 currently do not meet the concept LOS.

The highest LOS on SR-120 is between the junctions of I-5 and SR-99, where the LOS in 2007 was LOS "E," by 2015 is expected to be LOS "F," if there are no capacity increasing projects implemented. Table 3.2 provides the existing LOS as well as LOS projections of how the corridor will be performing in 2015 and 2030. In addition it provides the concept facility and UTC that identifies the facility that will be needed for beyond the twenty year planning horizon.

**Table 3.2: LOS, Concept Facility, and UTC**

Segment Postmile	Description	Existing Facility	LOS (2007) Existing Facility	LOS w/ Existing Facility (2015)	LOS w/ Existing Facility (2030)	Concept LOS	Concept Facility	UTC
<b>STATE ROUTE 120 SAN JOAQUIN COUNTY</b>								
Seg. 1 00.00/ T6.872	Junction I-5 to SR-99	4F	E	F	F	D	6F	8F
Seg. 2 R6.2/ T6.83	Junction SR-99 S. to Austin Rd.	4C	B	B	C	D	4C	4C
Seg. 3 T6.83/ 11.64	Austin Rd. To French Camp Rd.	2C	D	E	E	C	4C	4C
Seg. 4 11.64/ 15.86	French Camp Rd. to Brennan Rd.	2C	D	E	F	C	4C	4C
Seg. 5 15.86/ 18.69	Brennan Rd. to Harold Ave. in Escalon	2C	D	D	E	D	4C	4C
Seg. 6 18.69/ 21.18	Harold Ave. in Escalon to Stanislaus County Line	2C	D	E	F	C	4C	4C

**Table 3.2: LOS, Concept Facility, and UTC Continued**

Segment Postmile	Description	Existing Facility	LOS (2007) Existing Facility	LOS w/ Existing Facility (2015)	LOS w/ Existing Facility (2030)	Concept LOS	Concept Facility	UTC
<b>STATE ROUTE 120 STANISLAUS COUNTY</b>								
Seg. 1 0.00/ 3.46	San Joaquin County Line to Valley Home Rd.	2E	D	E	F	C	2E	4E
Seg. 2 3.46/ 4.26	Valley Home Rd. to Stanislaus River	2C	E	F	F	C	2C	4C
Seg. 3 4.26/ 5.12	Stanislaus River to Junction SR-108	4C	C	C**	D**	D**	4C	4C
Seg. 4 5.12/ 6.04	Junction SR-108 to Maag	4C	B	C**	D**	D**	4C	4C
Seg. 5 6.04/ 10.11	Maag to 0.87 mi. E. of Wamble Rd.	2C	E	E**	F**	D**	4C or NCC*	4C or NCC*
Seg. 6 10.11/ 14.26	0.87 mi. E. of Wamble Rd. to 0.22 mi. E. of Lancaster Rd.	2E	D	D**	F**	C**	4E or NCC*	4E or NCC*
Seg. 7 14.26/ T18.16	0.22 mi. E. of Lancaster Rd. to Tuolumne County Line	2C	D	E	F	C	2C	4C
<b>STATE ROUTE 120 TUOLUMNE COUNTY</b>								
Seg. 1 R0.00/ T6.96	From Stanislaus County line to 0.25 mi. W. of Green Springs Rd. to Yosemite Junction	4E	A	A	A	C	4E	4E
Seg. 2 T6.96/ 12.07	From 0.25 mi. W. of Green Springs Rd. to Yosemite Junction	2E	E	F	F	C	4E	4E
Seg. 3 12.07/ 15.52	E. Junction SR-108 to Montezuma Rd., N. Junction SR-49	2C	B	B	C	C	2C	2C
Seg. 4 15.52/ 23.90	Montezuma Rd. N. Junction SR-49 to S. Junction SR-49	2C	D	E	F	C	2C	4C
Seg. 5 23.90/ 30.32	S. Junction SR-49 to Wards Ferry Rd./Big Oaks Rd.	2C	B	C	C	C	2C	2C
Seg. 6 30.32/ 32.55	Wards Ferry/Big Oaks Rd. to Ferretti Rd. in Groveland	2C	C	D	D	C	2C	4C
Seg. 7 32.55/ 38.90	Ferretti Rd. in Groveland to Hells Hollow Rd.	2C	D	D	E	C	2C	4C
Seg. 8 R38.90/ R41.52	Hells Hollow Rd. to Mariposa County Line	2E	D	D	D	C	2E	4E
Seg. 9 R41.52/ R43.75	Tuolumne County Line to Tuolumne County Line	2E	D	D	E	C	2E	4E
Seg. 10 R43.75/ R56.51	Mariposa County Line to Yosemite National Park	2E	C	D	D	C	2E	4E

\*NCC: North County Corridor

\*\* LOS shown does not represent intersection level of service which is significantly worse than the conditions currently shown.



**Table 3.2: LOS, Concept Facility and UTC Continued**

Segment Postmile	Description	Existing Facility	LOS (2007) Existing Facility	LOS w/ Existing Facility (2015)	LOS w/ Existing Facility (2030)	Concept LOS	Concept Facility	UTC
<b>STATE ROUTE 120 MARIPOSA COUNTY</b>								
Seg. 10 R43.75/ R56.51	Mariposa County Line to Yosemite National Park	2E	C	D	D	C	2E	4E

### 3.2.1 SR-120 Connecting Highways and Corridor Volumes and LOS

A performance assessment has been completed for highway connections along SR-120 to evaluate existing and projected connecting highway LOS. Table 3.2.1 below identifies the existing and future projected LOS along the SR-120 connecting highways.

**TABLE 3.2.1: SR-120 Connecting State Highway Volumes and LOS**

State Route 120 Corridor		Connecting Highway		Connecting Corridor ADT 2007	Existing Facility LOS 2007	Connecting Corridor ADT 2015	Existing Facility LOS 2015	Connecting Corridor ADT 2030	Existing Facility LOS 2030
Seg.#/ Postmile	Description	PM	Description						
STATE ROUTE 120 SAN JOAQUIN COUNTY									
#1/ 0.00-T6.87	Junction I-5 to Junction SR-99 South	6.683/ 7.683	SR-99 from SR-120 N. to 1 mi. beyond SR-120	79,000	F	97,960	F	133,510	F
#1/ 0.00-T6.87		5.368/ 6.368	SR-99 from SR-120 N. to 1 mi. beyond SR-120	98,000	F	121,520	F	165,620	F
#1/ 0.00-T6.87		4.368/ 5.368	SR-99 from SR-120 S. to 1 mi. beyond SR-120	108,000	D	133,920	F	182,520	F
#1// 0.00-T6.87		14.869 /15.87	I-5 from SR-120 to 1 mi. N. of SR-120	130,000	F	161,200	F	219,700	F
#1/ 0.00-T6.87		14.338 /14.7	I-5 from 0.531 mi. S. of SR-120 to SR-120	160,000	F	198,400	F	270,400	F
#1/ 0.00-T6.87		14.184 /14.34	I-5 from 0.676 mi. S. of SR-120 to 0.531 mi. S. of SR-120	160,000	D	198,400	F	270,400	F
#1// 0.00-T6.87		13.869 /14.18	I-5 from 1 mi. S. of SR-120 to 0.676 mi. S. of SR-120	160,000	C	198,400	E	270,400	F
STATE ROUTE 120 STANISLAUS COUNTY									
#3/ 4.26/ 5.12	Stanislaus River to Junction SR-108	37.235 /38.24	SR-108 from 1 mi. W. of SR-120 to SR-120	22,300	B	27,700	C	37,700	D

**TABLE 3.2.1: SR-120 Connecting State Highway Volumes and LOS Continued**

State Route 120 Corridor		Connecting Highway		Connecting Corridor ADT 2007	Existing Facility LOS 2007	Connecting Corridor ADT 2015	Existing Facility LOS 2015	Connecting Corridor ADT 2030	Existing Facility LOS 2030
Seg.#/ Postmile	Description	PM	Description						
STATE ROUTE 120 TUOLUMNE COUNTY									
#4/ 15.52- R23.90	Montezuma Rd., N. Junction SR-49 to South Junction SR-49	5.356- 6.356	SR-49 from 1 mi. Southeast of SR-120 to SR-120 and SR-49	870	A	1,020	A	1,280	A
#2/ T6.96-12.07	From 0.25 Mi. West of Green Springs Rd. to Yosemite Junction	L0.00- L1.00	SR-108 from Yosemite Junction SR-120/SR-108 to 1 mi. N. of SR-120.	16,700	D	19,400	D	24,400	D
STATE ROUTE 120 MARIPOSA COUNTY									
None									

### 3.3 TCR Concept Facility

Based on the projected performance of the corridor over the next 20 years, demand will continue to exceed capacity. It is projected that six lanes will be needed from SR-99 to I-5 on SR-120 and the project is included within the SJCOG RTP as a Tier 1 project. The concept facility for this location is six lanes from SR-99 to I-5 on SR-120. The concept facility includes strong consideration of ramp metering and consideration for HOV lanes at build out of eight lanes along this freeway portion to improve corridor performance.

The 2009 San Joaquin Regional Ramp Metering and HOV Master Plan recommends ramp metering on SR-120 from SR-99 to I-5 West (along the Manteca Bypass), and will evaluate every interchange on the corridor for possible placement of ramp meter infrastructure where determined it might be needed. Ramp metering was considered to be effective along this section of freeway between SR-99 and I-5 in San Joaquin County. The plan also identifies the need for HOV lanes at the point when fourth lanes will be added in each direction. This will be at least beyond the 20 year concept facility period. SJRTD has recommended the consideration of HOV transit ramps to accommodate transit when considerations are made for implementing HOV lanes on SR-120 as well.

Other strategies will include expansion of incident management, traveler information, traffic surveillance and detection, advanced traffic signals, and operational improvements. It is recommended that the local jurisdictions consider the connectivity of existing and construction of new frontage roads in future commercial and residential development along SR-120 along the freeway portion between SR-99 and I-5.

For the rest of San Joaquin County, between SR-99 to the Stanislaus County Line the concept facility is a four-lane conventional highway.

In Stanislaus County, from the Stanislaus County Line to Valley Home Road the concept facility is a four-lane expressway. The concept facility is a four lane conventional highway from Valley Home Road to Maag Road. From Maag Road to 0.22 miles east of Lancaster the concept facility is a four-lane expressway or the NCC. From 0.22 miles east of Lancaster Road to the Tuolumne County Line the concept facility is a four-lane conventional highway.

In Tuolumne County from the Stanislaus County Line to Yosemite Junction the concept facility is a four-lane expressway. From Yosemite Junction to SR-49, the concept facility is a two-lane conventional highway. From SR-49 to the south junction SR-49, the concept facility is a four-lane conventional highway. From south junction of SR-49 to Wards Ferry/Big Oaks Road the concept facility is a two-lane conventional highway. From Wards Ferry/Big Oaks Road to Hells Hollow Road, the concept facility is a four-lane conventional highway. From Hells Hollow Road (including the small portion of highway in Mariposa County) to Yosemite National Park, the concept facility is a four-lane expressway.

Caltrans District 9, has identified the concept facility for SR-120 east of Tuolumne/Mono County Line as a two-lane expressway.

### **3.3.1 Ultimate Transportation Corridor**

Identification of the UTC ensures that adequate right-of-way will be preserved to accommodate facility improvement projects beyond 2030. Because of right-of-way, environmental, and financial constraints the UTC for SR-120 between SR-99 and I-5, it will be limited to eight lanes. The UTC results for each segment on SR-120 in San Joaquin, Stanislaus, Tuolumne and Mariposa Counties can be found in Table 3.2 LOS, Concept Facility and UTC on pages 60-62. The concept facility and UTC will be re-evaluated during the next update of the SR-120 TCR.

## **3.4 SR-120 TCR Corridor Programmed and Planned Projects**

The SR-120 TCR includes improvements directly or indirectly impacting the transportation network that are under development or in construction. These improvement projects are either fully or partially programmed (funded) or planned (usually without specific funding sources identified).

### **3.4.1 Programmed Capacity and Interchange Projects**

There is currently one programmed interchange project along the SR-120 corridor considered to be a Tier 1, fiscally constrained project. It is located in San Joaquin County. Table 3.4.1 lists the project currently programmed for the SR-120 corridor on the SR-120 corridor.

**Table 3.4.1: Programmed Capacity and Interchange Projects**

Primary Funding Source	RTP Y/N Tier I Tier II	RTP MPO ID EA	Postmile		Location	Description	Total Cost (\$1, 000)	Begin Const.
STATE ROUTE 120 SAN JOAQUIN COUNTY								
Local	Y Tier I	A7/SJO 7-2012 OP200	R3.4	R5.2	SR-120 & Union Rd. Interchange	Reconstruct Interchange	29,900	12/5/11
STATE ROUTE 120 STANISLAUS COUNTY								
No Projects								
STATE ROUTE 120 TUOLUMNE COUNTY								
No Projects								
STATE ROUTE 120 MARIPOSA COUNTY								
No Projects								

**3.4.2 Planned Capacity and Interchange Projects**

Planned improvements are those projects without guaranteed funding. There are fourteen planned capacity and interchange projects on the SR-120 corridor. There are nine planned projects located in San Joaquin County. There is one planned project in Stanislaus County. There are two planned projects in Tuolumne County. There are no planned projects in Mariposa County.

**San Joaquin County:**

- A new branch connection (2-lane structures) for I-5/SR-120 west to north, and I-5 to SR-120 east interchanges.
- An interchange reconstruction at SR-120 at Yosemite/Guthmiller Interchange.
- Oversight for interchange modifications at SR-120 and Airport Road Interchange.
- At SR-120 from Jack Tone Road to Sexton Rd and McHenry Road – west of Escalon, widen from Jack Tone Rd by creating a 5-lane conventional highway to Sexton Road and create a new South Alignment to McHenry Road.
- From McHenry Road to the existing SR-120 at Harrold Avenue, east of Escalon, widen to a 5-lane conventional highway to the Stanislaus County Line.
- One project is to widen SR-120 between I-5 and SR-99 from four to six lanes. The right-of-way for the additional lanes will come from the inside shoulders.
- There are also three interchange improvements along this segment. The first is to reconstruct the McKinley Avenue interchange including necessary auxiliary lanes. The other two interchanges to be reconstructed are the Airport Way and Main Street interchanges.



### Stanislaus County:

- In Stanislaus County the North County Corridor is a project to construct a two to six lane expressway from SR-99/SR-219 to SR-120/SR-108. It is 25 miles in length.

### Tuolumne County:

- In Keystone, Widen to a four lane expressway between SR-120 and an existing four lane section.
- In Groveland on SR-120 – construct a new two to four lane expressway (bypass) from Wards Ferry Road to Ferretti Road.
- Passing Lane/Climbing Lane improvements between Mocassin and Big Oak Flat.

Table 3.4.2 lists planned projects for the SR-120 corridor.

**Table 3.4.2: Planned Capacity and Interchange Projects**

Primary Funding Source	RTP Y/N Tier I Tier II	RTP MPO ID	Postmile		Location	Description	Total Cost (\$1, 000)	Begin Const.
STATE ROUTE 120 SAN JOAQUIN COUNTY								
TBD	Y Tier II	SJ07-1026	0.0	0.0	I-5/SR-120 SR-120 West to I-5 North, and I-5 South to SR-120 East	New Branch Connection Interchange (2-lane structures)	35,500	UNK
Measure	Y Tier I	SJ-1014	0.00	6.87	SR-120 from I-5 to SR-99	Widen 4-6 Lanes (inside shoulder)	78,000	2025 (RTP)
TBD	Y Tier II	SJ07-2038	1.188	1.510	SR-120 at Yosemite/Guthmiller Interchange	Reconstruct Interchange	2,200	UNK
Local	Y Tier I	2014/SJ09-2009	R2.295	R2.295	SR-120 and McKinley Ave.	Reconstruct Interchange including necessary Auxilliary Lanes	32,093	2012 (RTP)
Local	N	0P650_K	3.0	3.6	SR-120 and Airport Rd. Interchange	Oversight over Interchange modifications	29,900	UNK
Local	Y Tier II	A51/SJ07-2010	3.0	3.6	SR-120 and Airport Way	Reconstruct Interchange	18,010	UNK
TBD	Y Tier I	A6/SJ07-2011	R5.278	R5.278	SR-120 and Main St.	Reconstruct Interchange	15,888	2015 (RTP)
TBD	Y Tier II	SJ07-1030	8.84	14.83	SR-120 from Jack Tone Rd. to Sexton and McHenry Rd.	West of Escalon, widen from Jack Tone 5-lane conventional to Sexton Rd. new South Alignment to McHenry Rd.	75,000	UNK
TBD	Y Tier II	SJ07-1029	17.104	18.691	McHenry to existing SR-120 at Harrold Ave.	East of Escalon, widen to 5-lane conventional to County Line.	25,000	UNK

**Table 3.4.2: Planned Capacity and Interchange Projects Continued**

Primary Funding Source	RTP Y/N Tier I Tier II	RTP MPO ID	Postmile		Location	Description	Total Cost (\$1, 000)	Begin Const.
STATE ROUTE 120 STANISLAUS COUNTY								
STIP, IIP, PFF, Tax Measure and Demo	Y Tier I	n/a	TBD	TBD	NCC SR 99 to SR 120/108	Construct 2-6 lane expressway	554,000	2020 (open to public)
STATE ROUTE 120 TUOLUMNE COUNTY								
TBD	Y Tier II	-	T6.96	12.07	Keystone	Widen to a 4-lane expressway between SR-120 and an existing 4-lane section	17,000	Buildout
TBD	Y Tier II	-	30.760	32.550	Groveland - SR-120	Construct new 2-4 lane expressway (bypass) from Wards Ferry Rd. to Ferretti Rd.	17,000	Buildout
TBD	N	-	T24.635	30.346	Between Mocassin and Big Oak Flat	Passing Lanes and Climbing Lanes	TBD	TBD
STATE ROUTE 120 MARIPOSA COUNTY								
No Projects								

### 3.5 Corridor Collision and Incidents

Based on the Traffic Accident Surveillance and Analysis System (TASAS) database information for the three year period (January 1, 2005 through December 31, 2007), 68.622 miles of the 96.822 mile-corridor experienced a lower than Statewide average rate (per million vehicle miles traveled). Table 3.5 provides additional SR-120 collision and incident information. Safety Conscious Planning is of critical importance and should be incorporated into all planning processes.

**Table 3.5: Corridor Collision and Incidents**

Segment	Post Mile	Description	Traffic Collision Rate (per million vehicle miles traveled) TASAS Table B (Jan 1, 2005-December 31, 2007)	
			Collision Rate	Statewide Average Rate
STATE ROUTE 120 SAN JOAQUIN COUNTY				
1	0.00/T6.872	Jct. I-5 to Jct. SR-99 South	0.66	0.70
2	6.20/6.83	Jct. SR-99 South to Austin Rd.	1.91	1.48
3	6.83/11.64	Austin Rd. to French Camp Rd.	0.82	0.78
4	11.64/15.86	French Camp Rd. to Brennan Rd.	0.71	0.77
5	15.86/18.69	Brennan Rd. to Harrold Ave. in Escalon	1.76	1.60
6	18.69/21.18	Harrold Ave. to Stanislaus County Line	0.59	0.78

**Table 3.5: Corridor Collision and Incidents Continued**

Segment	Post Mile	Description	Traffic Collision Rate (per million vehicle miles traveled) TASAS Table B (Jan 1, 2005-December 31, 2007)*	
			Collision Rate	Statewide Average Rate
STATE ROUTE 120 STANISLAUS COUNTY				
1	0.00/03.46	San Joaquin County Line to Valley Home Rd.	0.82	0.60
2	03.16/04.26	Valley Home Rd. to Stanislaus River	1.55	1.12
3	04.26/05.12	Stanislaus River to Junction SR-108	3.01	2.81
4	05.12/06.04	Junction SR-108 to Maag	3.85	2.56
5	06.04/10.11	Maag to 0.87 mi. E. of Wamble Rd.	0.65	0.97
6	10.11/11.63	0.87 mi. E. of Wamble Rd. to 0.22 mi. E. of Lancaster Rd.	0.59	0.59
7	11.63/18.16	2 mi. E. of Lancaster Rd. to Tuolumne County Line	0.60	1.13
STATE ROUTE 120 TUOLUMNE COUNTY				
1	R00.00/T6.96	From the Stanislaus County Line to 0.25 mi. W. of Green Springs Road (4-lane expressway to beginning 2-lane expressway)	0.73	0.55
2	T6.96/12.07	From 0.25 mi. W. of Green Springs Rd. to Yosemite Junction (2-lane expressway)	0.60	0.60
3	12.07/15.52	East Junction SR-108 to Montezuma Rd. North Junction SR-49	0.80	1.36
4	15.52/23.90	Montezuma Rd. North Junction SR-49 to South Junction. SR-49	0.35	0.65
5	23.90/30.32	South Junction SR-49 to Wards Ferry/Big Oaks Rd.	0.79	1.58
6	30.32/32.55	Wards Ferry/Big Oaks Rd. to Ferretti Rd. in Groveland	1.33	1.67
7	32.55/38.90	Ferretti Rd. in Groveland to Hells Hollow Rd.	0.29	1.54
8	38.90/41.52	Hells Hollow Rd. to Mariposa County Line	0.43	0.95
9	41.52/43.75	Tuolumne County Line to Tuolumne County Line	0.25	0.95
10	43.75/56.51	Mariposa County Line to Yosemite National Park	0.64	0.95
STATE ROUTE 120 MARIPOSA COUNTY				
1	41.52/43.75	Tuolumne County Line to Tuolumne County Line	0.25	0.95

\* Stanislaus County Traffic Collision data is from Jan 1, 2006 – December 31, 2008.

Due to the higher accident rate than the statewide average on segment #2 in San Joaquin County examining operational improvements including looking at access management is recommended to be considered for treatment between SR-99 and Austin Road.

### 3.6 Existing Corridor Transportation Management Strategies

#### 3.6.1 Incident Management

The standard operating procedure and protocol for incident management of collisions and closures for natural causes on SR-120 is coordinated between the California Highway Patrol and the Caltrans District 10 Transportation Management Center. Semi annual team meetings are held with CHP, Caltrans, and San Joaquin, Stanislaus, Tuolumne and Mariposa county agencies to discuss incident, construction, maintenance, and special event traffic management including permit related issues. Communication with the media is coordinated through the CHP.

Key ITS elements are strategically placed at major decision points and areas with high incident rates where extensive data is gathered through traffic monitoring stations, roadside weather information systems (RWIS), and closed circuit television. Caltrans District 10 communicates road and weather information via the Caltrans Highway Information Network (CHIN), changeable message signs, and highway advisory radio. Advanced traveler information systems are available through the telephone and internet via the Performance Measurement System, RWIS, and other statewide databases.

### **3.6.2 Transportation Management Plan**

The transportation management plan for projects through the TCR corridor area includes educating the traveling public through CMSs, HARs, roadside signs and the media prior to and during construction. During construction, traffic will be managed through the use of k-rail barriers, temporary road alignments, and temporary signing/pavement delineation to provide a safe environment for both construction crews and the traveling public. Construction is typically performed during the night to avoid peak demand periods. In San Joaquin County, Freeway Service Patrol (FSP) may be available during the day to relieve incident-related congestion on certain corridors or during certain construction projects. The use of Park and Ride lots, carpools and transit will be encouraged. Public transit may be subsidized with a portion of the construction resources to promote the use of transit by providing discount prices during construction.

### **3.6.3 Ramp Metering and HOV Strategies**

Rapid growth in the SJV has produced significant congestion on the regional routes connecting the population centers in the SJV with job locations in the SJV and in the neighboring Sacramento and San Francisco/San Jose/Bay areas. Although commitments have been made for funding of transportation improvements, the funds are not likely to be sufficient to provide the highway capacity needed to meet the growth forecasts for the next twenty to twenty-five years. San Joaquin and Stanislaus Counties are also part of the eight-county SJV Air Basin, which is in non-attainment for two of the six criteria pollutants specified by the Clean Air Act: ozone and PM<sub>2.5</sub>. There is urgent need to ensure that future travel is accommodated in the most efficient manner possible with the least impact on air quality.

Caltrans contracted with SJCOG to develop the *Northern San Joaquin Valley Regional Ramp Metering and High Occupancy Vehicle Lane Master Plan*, for the San Joaquin region including the counties of San Joaquin, Stanislaus, and Merced in 2006, the plan was completed in 2009. HOV lanes and ramp metering are effective operational tools for managing congestion on freeways and thereby improving regional and interregional mobility. HOV lanes are common in metropolitan areas and are the basis for innovation with the recent implementation of High Occupancy Toll (HOT) lanes. California implements ramp metering in highly congested corridors during peak traffic hours to improve freeway speeds and safety. However, in San Joaquin County, there is only one operating ramp meter and no HOV lanes. There are no ramp meters or HOV lanes in Stanislaus or Merced Counties.

The purpose of this joint Caltrans/SJCOG effort is to develop a Ramp Metering and HOV Master Plan through system analysis and political consensus, resulting in a product that all stakeholders



will be able to adopt and implement, in collaboration with State and local partners. The draft Ramp Metering and HOV Master Plan identifies that ramp metering can be effective for mitigating bottleneck impacts and avoiding the breakdown of mainline flow in both eastbound and westbound directions of SR-120 in San Joaquin County between I-5 and SR-99 during both the morning and afternoon peak periods as early as 2015. The draft Ramp Metering and HOV Master Plan also identifies that HOV lanes would be also within this freeway portion of SR-120 when widened to four lanes in each direction. The potential benefits of vanpools, buses, motor cycles and approved hybrid and low emitting vehicles is the overall reduction in person hours of travel, reduced vehicle miles of travel, reduced gasoline consumption and reduced pollutant emissions.

### **3.7 Corridor Rehabilitation and Maintenance Strategy**

The current rehabilitation strategy is to maintain and rehabilitate the existing facility. Projects from the SHOPP are prioritized by the needs of the State Highway. These projects maintain or improve the condition, safety, and operation of the highway, and protect the investment that has been made on the facility. The SHOPP program includes six types of projects that would affect SR-120:

- a) Collision Reduction
- b) Roadway Preservation
- c) Bridge Preservation
- d) Roadside Preservation
- e) Mobility Improvements
- f) Mandates (storm water requirements and emergency-type projects)

Nominated projects within each category compete for available dollars with other projects on a statewide basis. Collision reduction improvements that meet certain thresholds of cost-benefit criteria are funded first from the SHOPP before other needs are addressed.

The 10-year SHOPP includes investments in projects in both the rehabilitation and preventive maintenance categories. This investment is expected to provide highway appearance and condition ratings similar to current conditions, which are less than Caltrans performance targets and the desires of the communities served by SR-120.

#### **3.7.1 Programmed Operational Improvement Projects**

There are two programmed operational improvement projects on the SR-120 Corridor. They are located in San Joaquin County. In Stanislaus County there is one project programmed. In Tuolumne County there are no projects that are programmed. In Mariposa County there are no projects that are programmed.

##### **San Joaquin County:**

- SR-120 from I-5 to SR-99 – Pavement Rehabilitation.

- SR-120 and Vasconcellos Avenue – Improve STAA Truck Turning Radius.

**Stanislaus County:**

- Install rumble strips from six miles east of the City of Oakdale from west of Lancaster Road to the Tuolumne County Line.

Table 3.7.1 lists the programmed operational and maintenance and rehabilitation projects along the SR-120 corridor.

**Table 3.7.1: Programmed Operational Improvement Project List**

Primary Funding Source	RTP Y/N Tier I Tier II	RTP MPO ID	Postmile		Location	Description	Total Cost (1, 000)	Begin Const.
SAN JOAQUIN COUNTY								
SHOPP	N	0V160	0.5	R6.4	SR-120 from I-5 to SR-99	Pavement Rehabilitation	14,000	11/15/10
SHOPP-MINOR A	N	0Q640	6.5	6.5	SR-120 & Vasconcellos Ave. Radius Improvement	Improve STAA Truck Turning Radius	UNK	12/21/10
STANISLAUS COUNTY								
SHOPP	N	0Q380	11.0	T18.2	Near Knights Ferry from 0.4 mi. W. of Lancaster Rd. to Tuolumne County Line	Install Rumble Strips	\$176	8/1/10
TUOLUMNE COUNTY								
No Projects								
MARIPOSA COUNTY								
No Projects								

### 3.7.2 Planned Operational Improvement Projects

The TCR development team has proposed eight operational improvements along the SR-120 TCR corridor. These improvements are proposed and currently not funded. There is one project planned in San Joaquin County. There is one operational improvement planned in Stanislaus County. There are two projects in Tuolumne County and none in Mariposa County.

**San Joaquin County:**

- Traffic light at SR-120 and Brennan Avenue.

**Stanislaus County:**

- State Route 120 Rumble Strips from six miles east of the City of Oakdale from west of Lancaster Road to the Tuolumne County Line.

**Tuolumne County:**

- At Yosemite Junction at the junction of SR-120/SR-108 and O'Byrnes Ferry Road, install traffic light and make geometric improvements.
- In Groveland, widen the roadway and install guard rails from Old Priest Grade to Big Oak Road.

- Intersection improvements at the intersection of Old Priest Grade Road and SR-120 (both the eastern and western locations).

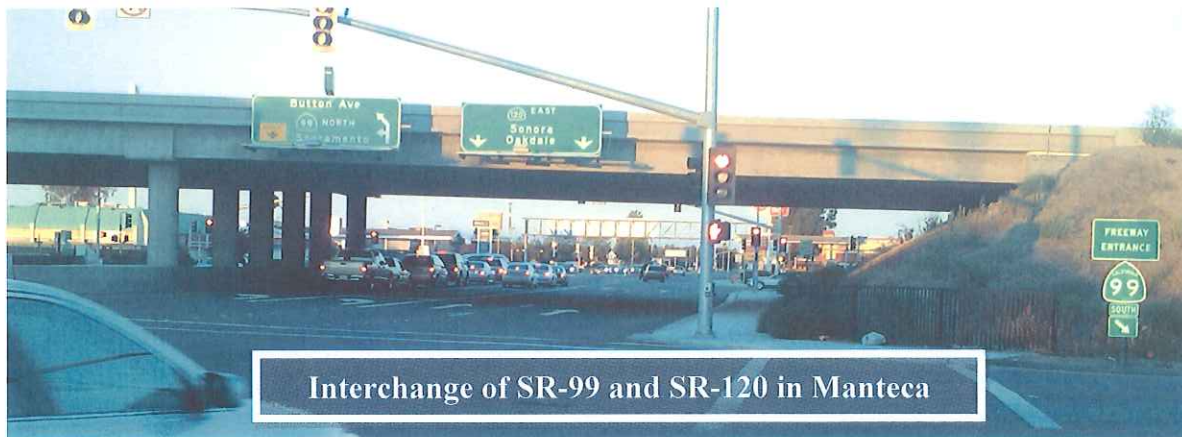


Table 3.7.2 lists the planned operational and rehabilitation projects on SR-120.

**Table 3.7.2: Planned Operational Improvement Project List**

Primary Funding Source	RTP Y/N Tier I Tier II	RTP MPO ID	Postmile		Location	Description	Total Cost (1, 000)	Begin Const.
SAN JOAQUIN COUNTY								
TBD	N	TBD	15.86	15.86	SR-120 at Brennan Avenue	Traffic Signal	TBD	TBD
STANISLAUS COUNTY								
SHOPP	N	0Q380	11.0	18.1	From 6 mi. E. of the City of Oakdale from W. of Lancaster Rd. to the County Line.	SR-120 Rumble Strips	2,200	UNK
TUOLUMNE COUNTY								
SHOPP	Y Tier1A	26	12.077	12.077	Yosemite Junction (SR-120/SR-108) at O'Byrnes Ferry Rd.	Install Traffic Signal and Geometric Improvements	TBD	2020
SHOPP	Y Tier IA	-	24.647	30.370	SR-120 in Groveland	Widen Roadway and Install Guard Rails from Old Priest Grade to Big Oak Rd.	2,500	2020
TBD	N	-	T24.635	29.26	SR-120 at Old Priest Grade Rd. (East/West)	Intersection Improvements	TBD	TBD
MARIPOSA COUNTY								
No Projects								

### 3.7.3 Corridor Maintenance Conditions and Preservation

#### 3.7.3.1 Pavement Conditions

The Caltrans Division of Maintenance conducts a Pavement Condition Survey (PCS) annually to identify pavement distress. Based on the most recent survey, the SR-120 corridor exhibits structural distress needing pavement rehabilitation. The PCS is used to identify needs in the roadway preservation programs (Roadway Rehabilitation and Pavement Preservation).

Based on 2008 maintenance pavement condition data, 33.5 lane miles in San Joaquin County, 20.6 lane miles in Stanislaus County, 66.7 lane miles in Tuolumne County and 3.2 lane miles in Mariposa County for a total of 124 lane miles along the entire corridor are identified for rehabilitation strategies. Table 3.7.3.1 lists the segments identified for rehabilitation strategies along the SR-120 corridor.

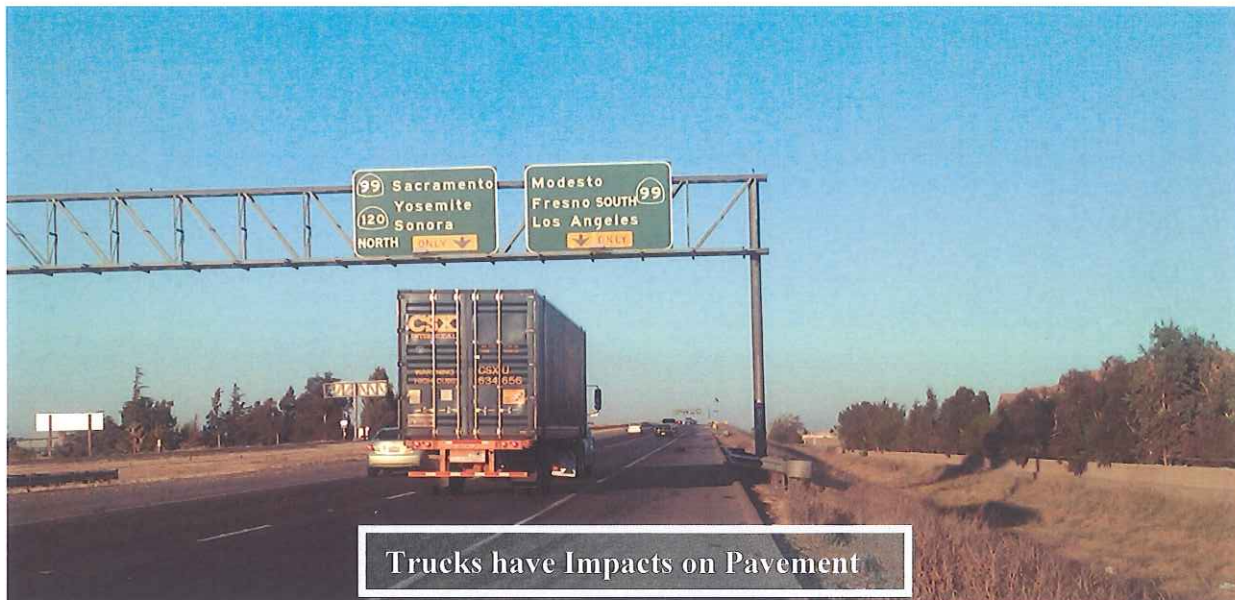
**TABLE 3.7.3.1: Existing Corridor Pavement Distress**

<b>STATE ROUTE 120 - 2008 MAINTENANCE CONDITIONS</b>		
<b>State Route/ Post Mile</b>	<b>Description</b>	<b># of Distressed Lane Miles</b>
<b>SAN JOAQUIN COUNTY</b>		
00.00-06.87	Junction I-5 to Junction SR-99 South	16.9
06.20-06.83	Junction SR-99 South to Austin Rd.	2.5
06.83-11-64	Austin Rd. to French Camp Rd.	6.6
11.64-15.86	French Camp Rd. to Brennan Rd.	0
15.86-18.69	Brennan Road to Harrold Avenue in Escalon	3.3
18.69-21.18	Harrold Ave. in Escalon to Stanislaus County Line	4.2
<b>Total Distressed Lane Miles</b>		<b>33.5</b>
<b>STANISLAUS COUNTY</b>		
00.00-03.16	San Joaquin County Line to Valley Home Rd.	2.0
03.46-04.26	Valley Home Rd. to Stanislaus River	0.0
04.26-05.12	Stanislaus River to Junction SR-108	0.0
05.12-06.04	Junction SR-108 to Maag	0.0
06.04-10.11	Maag to 0.87 mi. E. of Wamble Rd.	9.1
10.11-14.26	0.87 mi. E. of Wamble Rd. to 0.22 miles E. of Lancaster Road	4.0
14.26-18.16	0.22 miles E. of Lancaster Road to Tuolumne County Line	5.5
<b>Total Distressed Lane Miles</b>		<b>20.6</b>



**TABLE 3.7.3.1: Existing Corridor Pavement Distress Continued**

STATE ROUTE 120 - 2008 MAINTENANCE CONDITIONS		
State Route/ Post Mile	Description	# of Distressed Lane Miles
<b>TUOLUMNE COUNTY</b>		
00.00-07.21	Stanislaus County Line to Green Springs Rd.	13.5
07.21-12.08	Green Springs Road to East Junction SR-108	0.0
12.08-15.52	East Junction SR-108 to Montezuma Rd. North Junction SR-49	4.0
15.52-23.90	Montezuma Rd. North Junction SR-49 to South Junction SR-49	11.0
23.90-30.32	South Junction SR-49 to Wards Ferry /Big Oak Roads	9.0
30.32-32.55	Wards Ferry /Big Oak Rd. to Ferretti Rd. in Groveland	4.8
32.55-38.90	Ferretti Rd. in Groveland to Hells Hollow Rd.	3.8
38.90-41.52	Hells Hollow Rd. to Mariposa County Line	3.5
41.52-43.75	Tuolumne County Line to Tuolumne County Line	0.6
43.75-56.51	Mariposa County Line to Yosemite National Park	16.5
<b>Total Distressed Lane Miles</b>		<b>66.7</b>
<b>MARIPOSA COUNTY</b>		
41.52-43.75	Tuolumne County Line to Tuolumne County Line	3.2
<b>Total Distressed Lane Miles</b>		<b>3.2</b>



### 3.7.3.2 Bridge Conditions

Office of Structures Maintenance and Investigations of the Engineering Service Center (OSM&I-ESC) conducts periodic inspections of all State structures. The Structures Replacement and Improvement Needs (STRAIN) report is used to identify needs for the Bridge Preservation Programs (Bridge Replacement/Rehabilitation, Scour Mitigation, Rail Replacement/Upgrade, Seismic Restoration and Widening). Based on the most recent reports, there are currently nine bridges identified on the STRAIN. Table 3.7.3.2 provides additional information on bridges identified for replacement and or improvement needs on the SR-120 corridor.

**TABLE 3.7.3.2: SR-120 Corridor Bridge Needs**

Postmile	Description	SR-120 Maintenance Bridge Data	
		Bridge Name	Bridge
San Joaquin County			
No Bridge Strain Noted			
Stanislaus County			
03.46-04.26	Valley Home Road to Stanislaus River	Stanislaus River (PM 4.26)	38 0023
11.63-T18.6	0.22 mi. E. of Lancaster Rd. to Tuolumne County Line	Blitz Creek (PM 12.22)	38 0065
Tuolumne County			
15.52-23.90	Montezuma Road, North Junction SR-49 to S. Jct. SR-49	Tuolumne River (PM 19.61)	32 0018
23.90-30.32	South Junction SR-49 to Wards Ferry /Big Oak Rd.	Moccasin Creek (PM R24.09)	32 0039
Mariposa County			
No Bridge Strain Noted			

### 3.7.4 Corridor Preservation Management Practices

#### 3.7.4.1 Right-of-Way, Preservation of Ultimate Transportation Corridor

Identification of the UTC and subsequent preservation of the right-of-way will ensure adequate ROW will be preserved to accommodate facility improvement projects beyond 2030. See pages 62-64 for the UTC information for SR-120 through each county.

Extensive development has occurred that will impact expansion of the freeway due to the heightened cost of right-of-way acquisition. Caltrans intends to work with local agencies to establish plan lines and interchange “footprints” so that local agencies can use their land-use authority to preserve the necessary right-of-way for the corridor. Caltrans also intends to work with local agencies to have plan lines adopted into those jurisdiction’s general plan circulation elements. This will also accelerate the necessary environmental clearances.

### **3.7.5 Access Control**

The California Freeway and Expressway System has made a large financial investment in access control to insure safety and operational integrity of the highways. The Freeway Agreement documents the understanding between Caltrans and the local agency relating to the planned traffic circulation features of the proposed facility. In the event that the freeway is fully constructed, it shows which streets may be closed or connected to the freeway; it shows which streets and roads may be separated from the freeway; it shows the location of frontage roads; and it shows how streets may be relocated, extended or otherwise modified to maintain traffic circulation in relation to the freeway. Agreements are often executed many years before construction is anticipated and they form the basis for future planning, not only by Caltrans, but also by public and private interests in the community.

The legislative intent for requiring Freeway Agreements is to obtain the local agency's support of local road closures and changes to the local circulation system and to protect property rights and to assure adequate service to the community. Access control is necessary on the freeway or expressway so that current and future traffic safety and operations are not compromised.

## **3.8 Smart Land Use Management Practices**

### **3.8.1 2007 San Joaquin Regional Congestion Management Program**

The 2007 SJCOG Regional Congestion Management Plan (RCMP), which was approved on December 6, 2007, by the SJCOG Board of Directors and became operative on January 2, 2008, reflects a renewed vision of the future of travel in San Joaquin County. This approach recognized that effective strategies must incorporate multiple partners, multiple modes of transportation, and multiple funding strategies to achieve success.

In addition to needing to meet the mandate for a RCMP provided by the 2006 renewal of County ordinance #06-01, the Traffic Relief, Safety, Transit, and Road Maintenance Program Ordinance (Measure K), SJCOG recognized that the goals of this revision were similar to those of the 2005 Federal transportation legislation, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU included a "Congestion Management Process" targeted at reducing Single Occupancy Vehicle (SOV) travel without increasing roadway capacity. As detailed within the Plan, the RCMP meets the requirements of the State CMP legislation and the Measure K Ordinance, and it is compliant with SAFETEA-LU.

Strategies to combat congestion and its impacts on economic development must focus on a broad set of supply-side and demand-side strategies that embrace the latest thinking about reducing SOV trips, including more pro-active land use and pricing policies, coordinated investment in alternative modes of transportation, and new incentives for getting people out of their cars. Among these strategies are the following:

- A land use monitoring, reporting and information program that considers how local land use decisions affect travel on the RCMP transportation network. This program provides a framework for identifying land uses that creates significant new peak hour vehicle trips, prepares a public reporting and accounting of the potential impacts, and guides developers and land-owners to utilize new strategies that promote a mix of uses, greater density, less

parking, and direct investment in transit, walking and/or biking.

- A set of multi-modal performance measures with specific standards that set targets for improving transit, walking, and biking throughout the county.
- A measurable goal to keep the VMT growth no larger than the growth in the county's population.
- A toolbox of TDM strategies for use by the region, municipalities, land owners and developers to begin building realistic incentives to reduce SOV trip-making far in advance of problematic congestion.
- A coordinated approach to congestion problems that brings all private and public partners together to find a workable and cost-effective solution which doesn't unrealistically rest responsibility on one entity.
- SJCOG is required to monitor all elements of the RCMP to ensure that the County and cities are in conformance with the RCMP. State CMP legislation mandates that a conformity determination be prepared biennially. In September of each odd numbered year, local governments are expected to work with SJCOG to develop a monitoring report for their jurisdiction. This report will cover the following requirements:
  - Documenting land use decisions made during the previous two years
  - Progress with implementation of identified programs
  - Progress with a detailed TDM and alternate modal program where required by a LOS "D" on the RCMP road network
  - Progress made in the development and implementation of Deficiency Plans for segments that are operating at a LOS of "E" or "F"
  - Adoption of a program to analyze the impacts of land use decisions, including an estimate of costs associated with mitigating these impacts
  - Submittal of projects for the CIP

Additionally, "Measure K" calls for an annual report to be produced and adopted by the San Joaquin Transportation Authority to determine and document the compliance of all local agencies and SJCOG. Should a local agency fail to comply with the requirements of Measure K, that agency will be suspended from being allocated Congestion Relief funds for new projects until found to be in compliance. By meeting conformance requirements local jurisdictions ensure that public funding for transportation improvements is not withheld.

### **3.8.2 2009 Congestion Management Process for the Stanislaus County Region**

The 2009 CMP for the Stanislaus County Region, which was approved on January 20, 2010, by the StanCOG Policy Board was funded in part through a grant from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation.

The 2009 StanCOG CMP for the Stanislaus County Region is an essential component of StanCOG's metropolitan planning process and an important element of the development of the RTP in its functionality as a filter for project selection, programming and performance monitoring. The CMP has been developed to improve multimodal mobility and avoid the creation of deficiencies. One means to this end is the evaluation of multimodal system performance for the movement of people and goods. The performance measures of the CMP support mobility, air quality, land use, and economic objectives, and are used to determine whether projects are to be included in the CMP Capital Improvement Program for consideration for inclusion in the RTP. The CMP is thus a performance-based program which is consistent with and assists in the implementation of the RTP's goals, objectives, and policies.

### **3.8.3 Developer Contributions**

#### **3.8.3.1 San Joaquin County**

In 2006 the incorporated cities within San Joaquin County, the County of San Joaquin, and the San Joaquin Council of Governments adopted a RTIF to ensure that new development in San Joaquin County provides adequate funding to mitigate the impact of the development on travel and congestion in the region. The RTIF Program's objective is to obtain funding from development projects that have an impact upon the Regional Transportation Network and to integrate these funds with federal, State, and other local funding to fund transportation improvements identified in the RTIF Program. The fees go towards improving regionally significant transportation routes in the region of San Joaquin County.

The current fee structure as of July 1, 2009, is on Table 3.8.3.1 as follows:

**Table 3.8.3.1: San Joaquin County Regional Transportation Impact Fee Structure**

Residential		Non-Residential		
Single Family	Multi-Family	Retail	Office	Industrial
\$3,001.79	\$1,801.08	\$1.20	\$1.51	\$0.90
DUE	DUE	Square Foot	Square Foot	Square Foot

The RTIF program is unique because each city/county collects the fee and controls the use of the majority of the fees collected on eligible projects at their discretion. A portion of the fees collected are distributed to the County of San Joaquin and SJCOG. The fee distribution and intended application of the fee is as follows:

- (a). Ten (10) percent of the amounts collected by the Cities shall be paid directly to the County on a quarterly basis for the purpose of funding RTIF Capital Projects within the County of San Joaquin.
- (b). Ten (10) percent of the amounts collected by each Participating Agency shall be paid directly to SJCOG on a quarterly basis for the purposes of funding State highway improvements on the RTIF Project List.



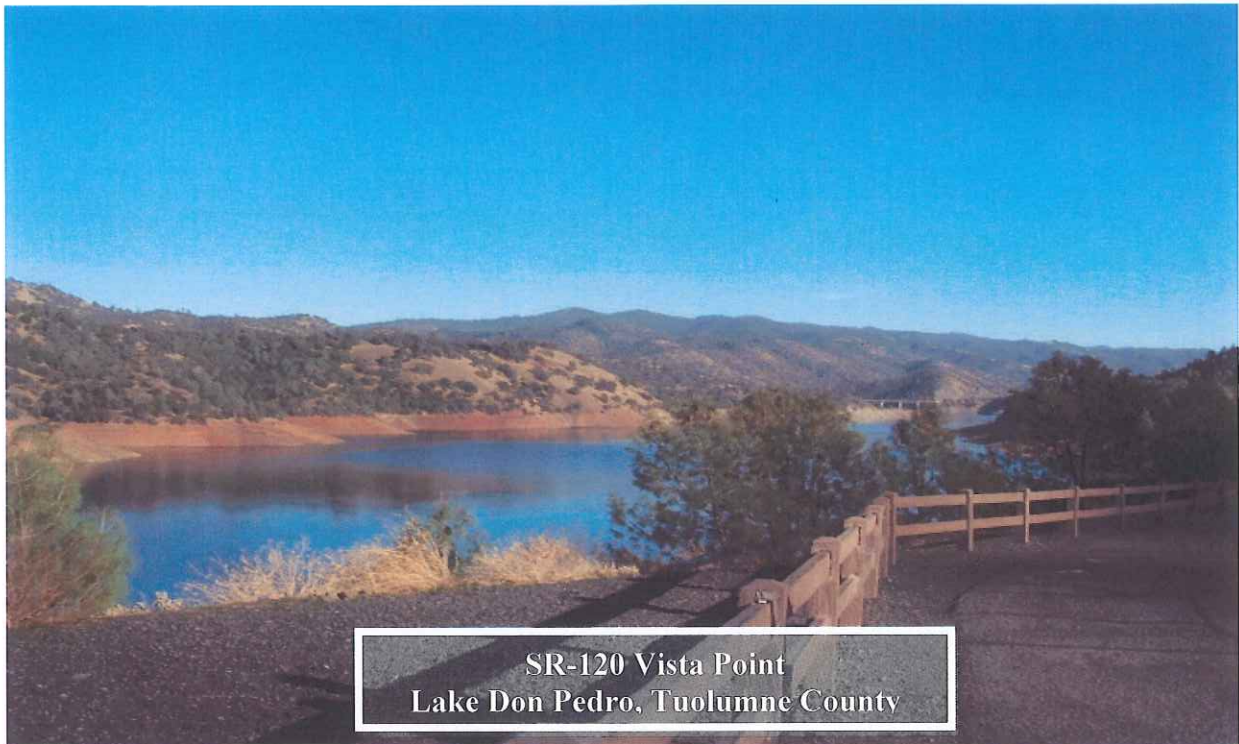
- (c). Five (5) percent of the amounts collected by each Participating Agency shall be paid directly to SJCOG on a quarterly basis for the purposes of funding transit improvements on the RTIF Project List.
- (d). Seventy Five (75) percent of the amounts collected by each city shall be retained by each city collecting such funds for the purposes of funding RTIF Capital Projects, and Eighty Five (85) percent of the amounts collected by the County shall be retained by the County for the purposes of funding RTIF Capital Projects.

### **3.8.3.2 Stanislaus County**

In Stanislaus County the Board of Supervisors approved entering into an Administrative Agreement with StanCOG for the formal administration of the RTIF portion of the County's Public Facilities Fees on March 21, 2006. However, this has not been implemented to date. Just recently, Stanislaus County has completed a new program. The current fee schedule can be found online at the following link:

<http://www.stancounty.com/CEO/econ-dev/pdf/county-impact-fee.pdf>

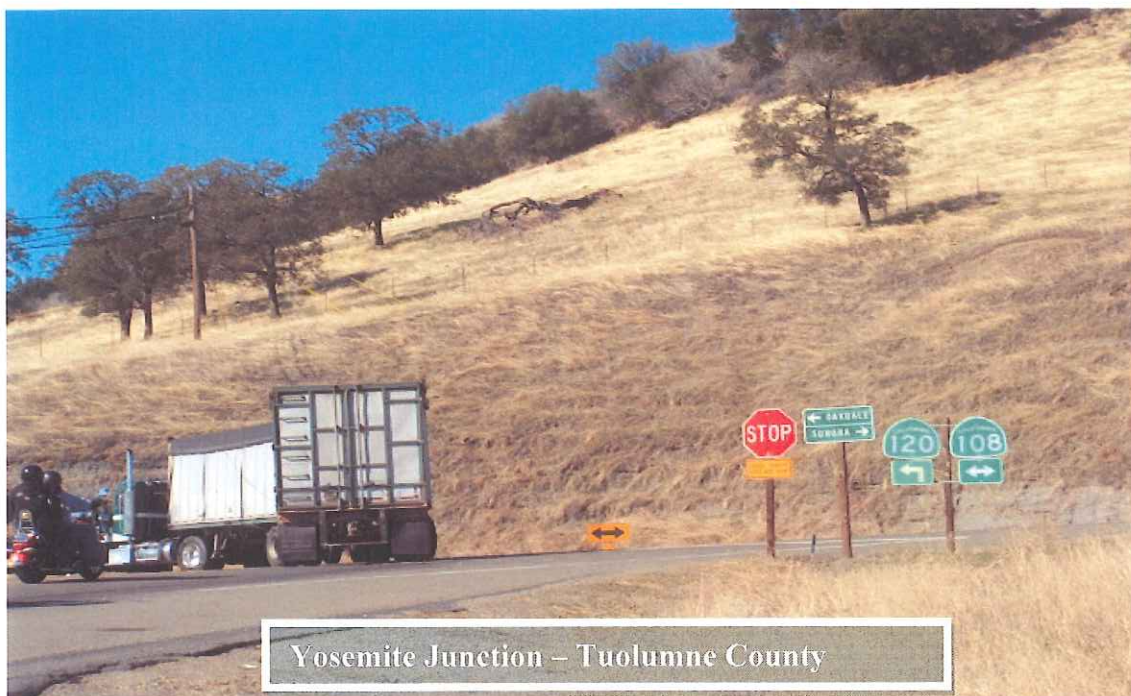
### **3.8.3.3 Tuolumne County**



In Tuolumne County a traffic mitigation fee structure is used. Some funds go for SR-120. Table 3.8.3.3 shows the regional traffic impact fee that is implemented by Tuolumne County:

**Table 3.8.3.3: Tuolumne County Traffic Mitigation Fees**

Application	Fee
Single Family less than 2 gross acres	\$2,886
Single Family Estate 2+ gross acres	\$3,900



### **3.8.4 Local Agency Transportation Impact Fees**

In San Joaquin County, all cities, and San Joaquin County collect traffic impact fees for the transportation system including the State Highway System. The fees are generally charged to new development projects or development expansion projects to offset the cost of needed roadway capacity improvements due to the auto trips generated from the development.

#### **3.8.4.1 City of Manteca Public Transportation Facilities Implementation Program Fees**

In the City of Manteca the following Local Agency Transportation Impact Fee applies effective March 19, 2010. Some portion is for SR-120. The fee schedule can be found online at the following link:

<http://www.ci.manteca.ca.us/forms/CommunityDevelopment/BuildingSafetyDivision/Devel%20Fee%20Sched.pdf>



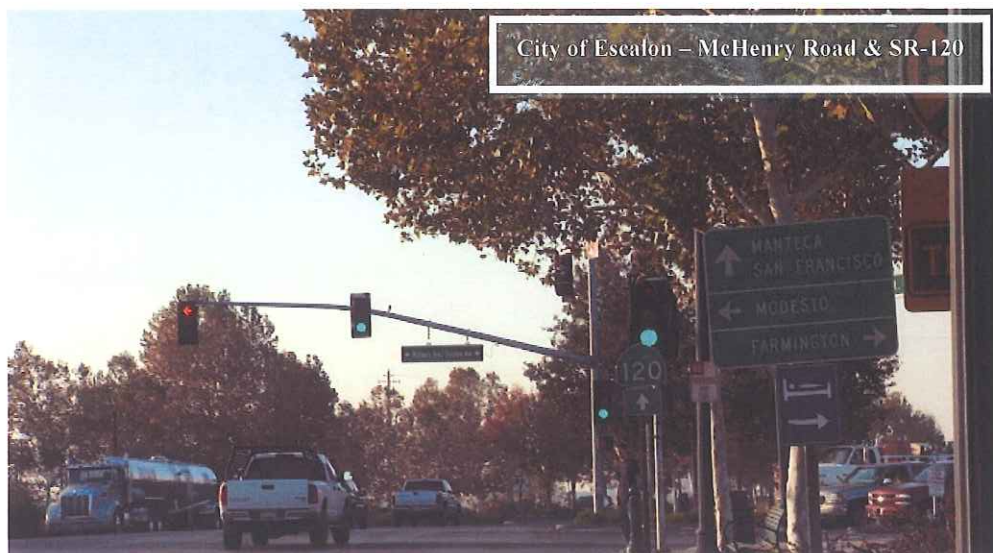


#### 3.8.4.2 City of Escalon Development Impact Fees

In the City of Escalon the following Local Agency Transportation Impact Fee applies effective January 1, 2010. In the City of Escalon this fee will apply as well as the San Joaquin County Regional Traffic Impact Fee to any developer. Some of the fees are used for SR-120. The City of Escalon Development Impact Fee structure is shown in Table 3.8.4.2.

**Table 3.8.4.2: City of Escalon Development Impact Fees**

Facility Type	Residential Land Uses		Non-Residential Land Uses	
	Single Family (Per Unit)	Multi-Family (Per Unit)	Commercial (per 1,000 Sq. Ft.)	Industrial (per 1,000 Sq. Ft.)
Transportation	\$9,711	\$6,353	\$5,639	\$2,678

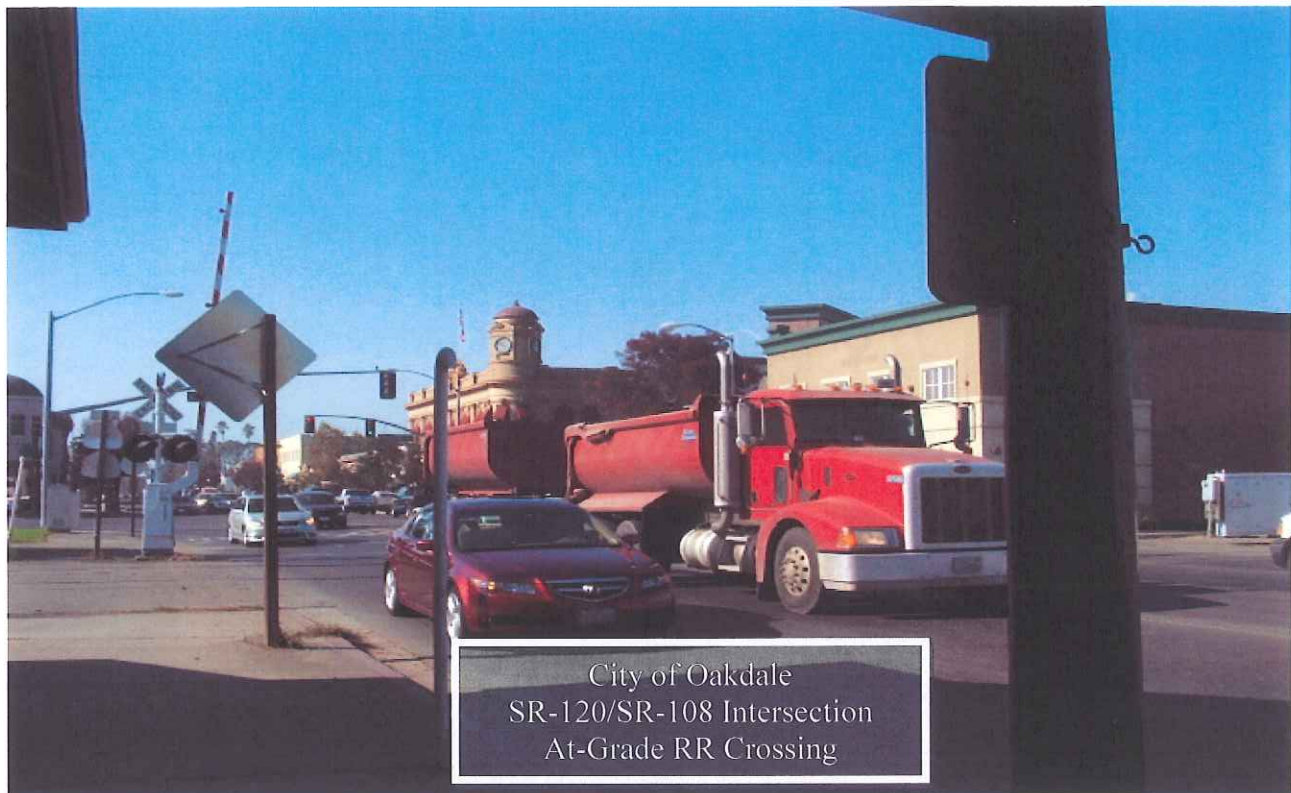


### 3.8.4.3 City of Oakdale Development Impact Fees

In the City of Oakdale, the following Local Agency Transportation Impact Fee applies as of April 3, 2006. Please note that the Stanislaus County fees (the city road fee) discussed in Section 3.8.3.2 by contrast, is only applied if the City does not collect a fee. In this case, the City of Oakdale collects their own fees. This means Stanislaus County does not collect a transportation fee for any development within the City of Oakdale limits. However, the County will in contrast collect a fee for developments that are built outside of the city's limits, but within its sphere of influence. Both the City and County collect some fees for SR-120. Table 3.8.4.3 following, applies only for City of Oakdale developments, and applies for both the East and West Area Fee Zones:

**Table 3.8.4.3: City of Oakdale Development Impact Fees**

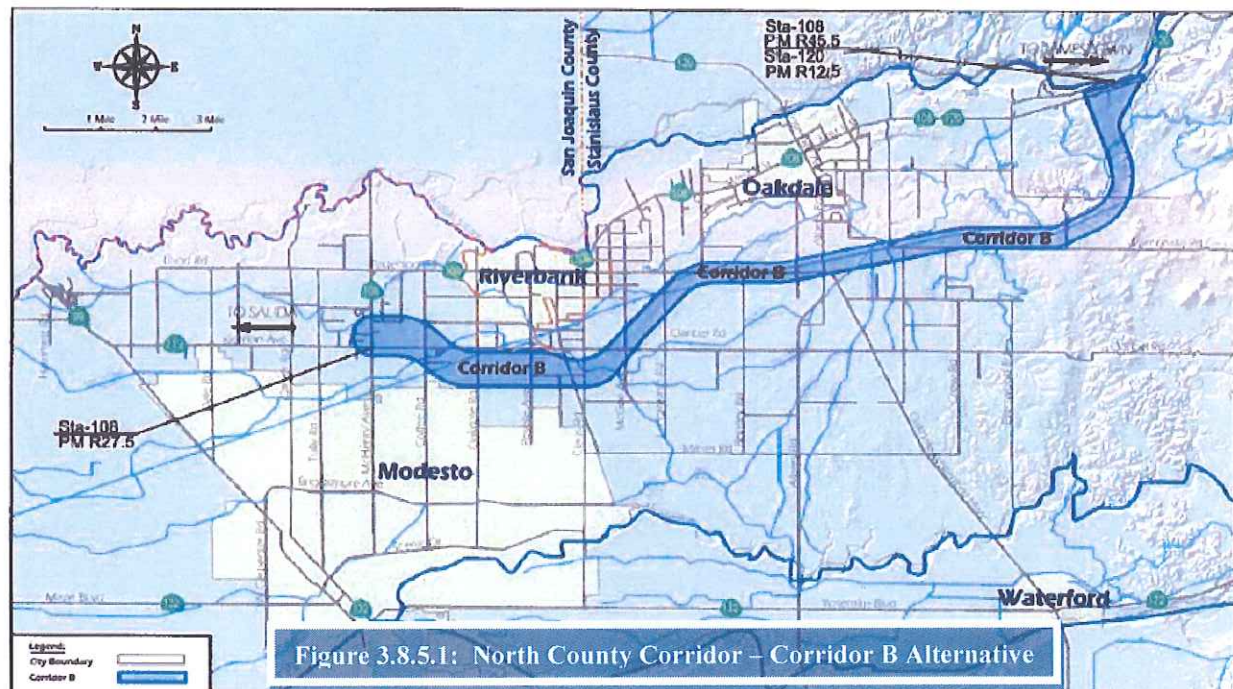
Facility Type	Residential Land Uses		Non-Residential Land Uses		
	Single Family (Per Unit)	Multi-Family (Per Unit)	Retail (per Sq. Ft.)	Office/Commercial (per Sq. Ft.)	Industrial (per Sq. Ft.)
Streets/Public Works	\$5,338	\$3,541	\$5.82	\$6.55	\$2.90





### 3.8.5 Regional Planning and Coordination

#### 3.8.5.1 North County Corridor



The North County Corridor (NCC) project will provide approximately 25 miles of roadway on new alignment to enhance local traffic circulation, to reduce congestion, improve safety, and preserve the mobility gains of the Proposition 1B CMIA investments of SR-219. The primary intent of the NCC project is to provide a high capacity/high speed east-west roadway to accommodate anticipated traffic growth in the area to alleviate traffic on parallel roadways and to accommodate multi-modal travel. The intersection of SR-120 and SR-108, and the at-grade rail road line, causes a traffic congestion situation which has influenced the development of the NCC.

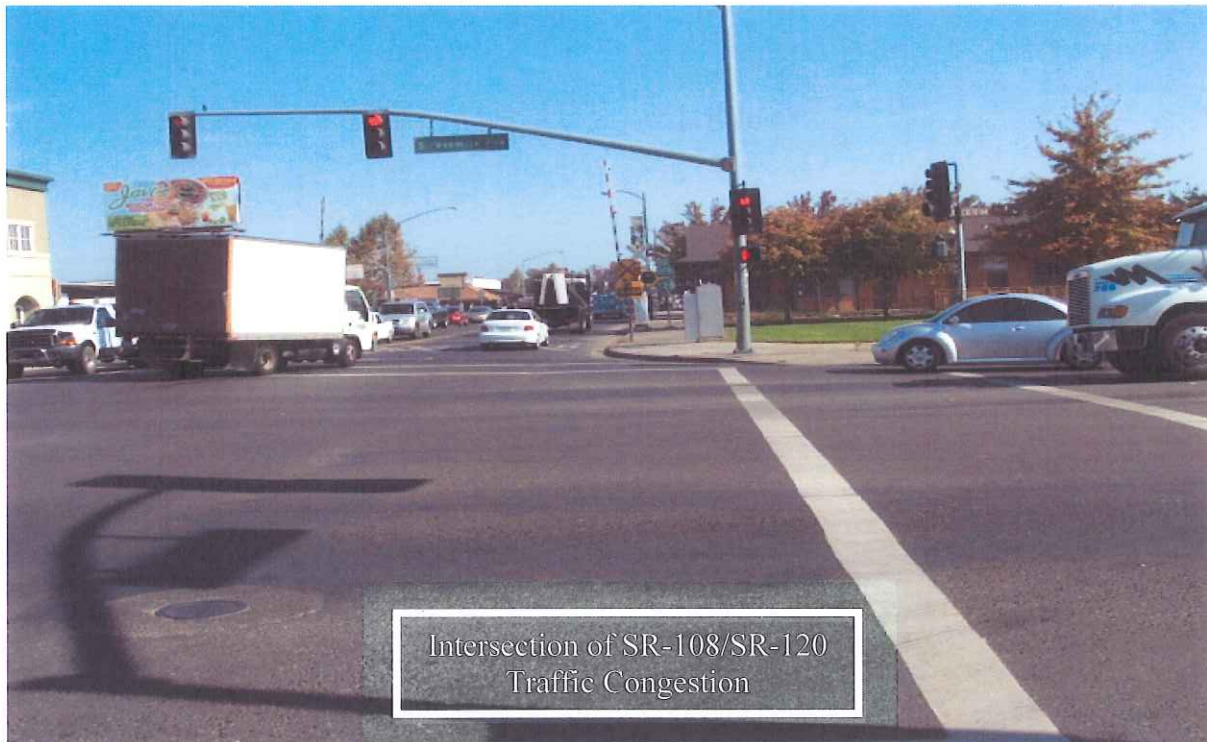
Traffic through SR-120 in the City of Oakdale is a combination of commuter, local commerce, and goods movement, with a large component of recreational traffic. This traffic currently conflicts with local traffic on the existing facilities, creating congestion and safety concerns, as well as, elevated noise and air pollution levels. These conditions are expected to worsen significantly over time as development continues and traffic increases within the corridor. Currently identified in Table 3.2, LOS, Concept Facility, and UTC on pages 62-64, LOS shown does not represent intersection level of service which is significantly worse than the conditions currently shown.

To plan for the new route, the North County Corridor Transportation Expressway Authority



(NCCTEA) was formed. The NCCTEA consists of Caltrans, Stanislaus Council of Governments (StanCOG); the cities of Oakdale, Riverbank, Modesto; and the County of Stanislaus.

The NCC Corridor B Alternative is the selected route adoption by the California Transportation Commission at their May 2010 meeting. It is described as follows: it will possibly begin at the eastern end of SR-219 to follow to the south of Riverbank and Oakdale and would merge at a location where SR-120 is concurrent with SR-108 to the east of the City of Oakdale. Corridor B alternative only represents the eastern corridor portion of the NCC. The western portion runs from SR-99 out to McHenry Avenue is still under study by the local agencies. Figure 3.8.5.1 on the previous page illustrates the North County Corridor, Corridor B Alternative.



### 3.8.5.2 Valley Wide Transit Study

Caltrans recently completed funding a partnership planning grant for the SJV Express Transit Study with MCAG as lead working with the counties of Kern, Kings, Tulare, Fresno, Madera, Merced, Stanislaus, and San Joaquin.

For a majority of the region, investments in ridesharing are the most cost-effective strategy for increasing inter-county commuter services. The region's focus should be on expanding vanpool offerings in both the northern and southern parts of the Valley. The new Air District rule requiring trip reduction programs from large employers offers the opportunity both for a new funding stream, and an effective marketing strategy for expanded vanpool offerings.

The region's existing inter-regional bus offerings match the highest demand corridors. In an extremely difficult funding environment for transit, the region's first priority should be to maintain these services to the extent possible. As additional funding becomes available, it should consider expanding subscription bus service from Stockton to Sacramento and the Bay Area. The region should also consider implementing bus service between Lancaster Metrolink station and Edwards Air Force Base in Eastern Kern County in partnership with the base.

The region's long-term vision for its highest demand corridors should include significant upgrades to commuter rail service. The region should lobby for state and federal funds to upgrade the speed, capacity, and reliability of ACE, and to add a similar service between Sacramento and Stockton (and perhaps as far south as Merced). If demand warrants, the region should also consider extending LA Metrolink into eastern Kern County. To the extent possible, all passenger rail investments should seek to capitalize on California High Speed Rail investments.

### **3.8.5.3 Interregional Transportation Partnership Planning**

San Joaquin Council of Governments was awarded a State Planning and Research Partnership Planning Grant during fiscal year 2008. The project, entitled Interregional Transportation Partnership (ITP), brings together key transportation planning agencies and stakeholders from the northern San Joaquin Valley and the Bay Area. The effort involves an extensive analysis of studies and literature targeting the I-580 Corridor. Based on this analysis, a series of transportation/land use scenarios are developed, qualified, and quantified for further analysis. The final product documents a combination of non-capacity increasing transportation/land use strategies for consideration between the San Joaquin Valley and the Bay Area that would have the greatest impact on improving the operational integrity of the I-580 corridor. At this point the grant has produced approximately 35 percent of the deliverables.

### **3.8.5.4 Valley Wide Regional Blueprint Strategies**

Building on successful planning studies conducted by several California metropolitan transportation planning agencies over the past five years, Caltrans provided a planning grant to MCAG on behalf of the eight SJV regional planning agencies to prepare a "visioning" plan for the Valley. The goal of the SJV Blueprint Planning Process is to facilitate the public's development and implementation of a SJV Regional Vision addressing the growth of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings and Kern Counties, with an emphasis that shows the links between: Land use, agricultural, environment, transportation, and air quality. SJCOG and Caltrans District 10 are actively participating in the Valley wide Regional Blueprint process.

### **3.8.5.5 Tuolumne County Regional Blueprint**

Funded by Caltrans planning grants, staff from the Transportation Council and County Community Development Department have researched the Blueprint Planning process based on using computer models. Developed using the same Geographic Information System (GIS) software Tuolumne County already employs, the UPLAN application is based on a model created at UC Davis. The model attempts to project where certain types of residential,

commercial and industrial development are likely to take place, by comparing the attractions and constraints for all of the possible locations.

Ultimately, the decisions on what factors to be employed and how strongly those factors should be weighted in the model will take place after considering input and comments through a committee process. After consensus has been achieved or decisions have been reached, the model results will be considered during future transportation and land use planning. Typically, Blueprint Planning is considered a deliberate exercise, and can take as long as 2-3 years to complete.

#### **3.8.5.6 California Partnership for the San Joaquin Valley**

The California Partnership for the San Joaquin Valley brings state agency secretaries and San Joaquin Valley representatives together to make recommendations to the Governor regarding changes that would improve the economic well-being of the Valley and quality-of-life to its residents.

The major goals of the Partnership are:

- Identify projects and programs that best utilize public dollars and most quickly improve the economic vitality of the Valley.
- Work with members of the State's Congressional delegation and federal officials.
- Partner with University of California, California State University, community colleges, and the state's others research and educational institutions, as well as private foundations.
- Review state policies and regulations to ensure they are fair and appropriate for the state's diverse geographic regions.
- Recommend to the Governor changes that would improve the economic well-being of the Valley and the quality-of-life of its residents.

### **Section 4 SR-120 Preliminary Performance Management and Maintenance Assessment**

This section summarizes the system management strategies that are needed to manage the performance of the corridor, and a comprehensive project listing of transportation improvements currently identified in the STIP, SHOPP, RTPs, and other transportation programming and planning documents along the SR-120 corridor. The segment fact sheets include operational, rehabilitation, interchange/intersection, capacity increasing projects See Appendices E-1 through G-10.

#### **4.1 SR-120 TCR Transportation System Management Strategies**

- The *Northern San Joaquin Valley Regional Ramp Metering and High Occupancy Vehicle Master Plan* identifies ramp metering can be effective for mitigating bottleneck impacts and avoiding the breakdown of mainline flow on SR-120 between I-5 and SR-99 in San Joaquin County however it is given "medium" priority and suggests 2030 as the date for implementation.

The Plan also identifies that SR-120 between I-5 and SR-99 as a “medium” potential for HOV lanes in the eastbound and westbound direction at the point when widened to four lanes in each direction. SR-120 is currently funded to widen to three lanes in each direction. The project will go to construction in 2012. SJRTD has recommended that all ramp metering and HOV lanes be designed to accommodate the operation of transit buses.

- Expansion of ITS elements to enhance incident management, traveler information, traffic detection, and synchronization of traffic signals. There are 43 existing ITS and 25 PeMS stations along the TCR corridor, and five ITS elements and no PeMS stations programmed for implementation. There are 12 ITS elements, and 30 PeMS stations that are planned and proposed for the corridor.

ITS project improvements are categorized as short-term (0 - 4 years), mid-term (5 - 7 years) and long-term (8 to 10 years). Short-term project goals for SR-120 include placing ITS elements at major decision points within STIP and SR-120 Bond funded projects. Mid-term project goals for SR-120 include TMS for congestion monitoring of lane volumes and possible travel time calculations, as well as Closed Circuit Television (CCTV) for incident verification and management. Long-term project goals for SR-120 include full instrumentation of ITS elements along freeway corridors.

- The management of collisions and closures for natural causes will continue to be coordinated between the CHP and the Caltrans District 10 TMC. Communication with the media will continue to be coordinated by the CHP. Coordination meetings will continue to be held twice a year with CHP, Caltrans, local agencies within San Joaquin Stanislaus, Tuolumne and Mariposa Counties, and the Office of Emergency Services to discuss incident, construction, maintenance, and special event traffic management, including permit related issues. In addition, the local CHP office will continue to communicate directly with the local resorts on weather and road conditions and chain control.
- There is one capacity increasing/interchange project programmed and 12 planned on the SR-120 corridor. In rural portions of the TCR corridor counties recognize that STIP revenues may be inadequate to fully fund needed local capacity increasing project. The unfunded need for these local projects need to continue to be considered for funding by the development and collection of traffic impact mitigation fees.
- Operational, rehabilitation and maintenance improvements will include auxiliary lanes, acceleration lanes, reconstruct and modify interchanges and bridges, AC overlays, median barriers, left turn lanes, extend left turn lanes passing lanes, bridge rail repair/replacement, traffic signals, off-ramp connections, pavement rehabilitation repair asphalt concrete blankets, soldier pile walls to mitigate erosion and repair slope/retaining walls, and landscaping. There are three programmed and three planned operational improvements planned for the TCR corridor.

The programmed and planned project improvements will provide safety and operational benefits at the location of the improvements and contribute to the overall improved performance of the corridor. Improvements are categorized as short-term (0 - 4 years), mid-term (5 - 7 years) and long-term (8 to 10 years). Short and mid-term project goals for SR-

120 include those currently programmed in the STIP and SHOPP. Long-term project goals include operational improvements not currently identified for funding.

- Expansion of transportation demand management practices. Plans for expansion of TDM practices include construction of new park and ride facilities with transit connectivity, and continued work force vanpool and ride share services through Commute Connection.
- Connectivity of bike and pedestrian facilities crossing and along SR-120.
- The San Joaquin Goods Movement Task Force will continue to evaluate and coordinate discussion of local STAA routes, access and truck parking issues.
- The CHP established a task force of regional and local agencies to identify and address traffic safety issues on State Routes 120, 49 and 108 which form the Sonora Pass Gateway Traffic Safety Corridor in Tuolumne County. The program operations phase was between October 1, 2008 and March 31, 2010. The task force met periodically to develop strategies to reduce the number of fatalities and injured. This safety project was funded through a grant issued to the CHP by the California Office of Traffic Safety.
- Maintain and support existing transit service along SR-120 and consider expansion when feasible.
- Consider the connectivity of existing and construction of new frontage roads when evaluating future transportation projects, and commercial and residential development along SR-120.

## **4.2 TCR Segment Fact Sheets**

The SR-120 TCR segment fact sheets from Appendices E-1 through G-10 includes a compilation of transportation information including a project listing of transportation improvements currently identified in the STIP, SHOPP, RTP, and other transportation programming and planning documents. It also includes Segment location, roadbed information, route designation, environmental status, forecasting data, traffic incident data and the segment route concept and ultimate transportation corridor concept.

## **4.3 Key Planning Approaches**

While project specific considerations are not included in this TCR, the following will need to be considered during the planning process.

### **4.3.1 Context Sensitive Solutions**

Caltrans uses “Context Sensitive Solutions” (CSS) as an approach to plan, design, construct, maintain and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. CSS are reached through a collaborative, interdisciplinary approach involving all stakeholders and meets transportation goals in harmony with community goals and natural environments.



CSS require careful, imaginative, and early planning, and continuous community involvement. The context of all projects and activities is a key factor in reaching decisions. It is considered for all State transportation and support facilities when defining, developing, and evaluating options.

Relevant laws, rules, and regulations must be investigated when considering CSS issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, and safety.

#### **4.3.2 Safety Conscious Planning**

Safety conscious planning is incorporated into all planning processes and complements context sensitive solutions. As in most projects, a need is established before a project can be built.

Factors such as congestion, collision patterns, poor LOS, narrow roads, non-standard alignments and operational problems, can facilitate safety improvements. The SR-120 TCR can be used as a tool to proactively identify operational problems rather than waiting to react to safety problems. Suggested solutions for these problems should conform to the surrounding environment and meet the needs of the people within, and users of these facilities should agree upon these community-sensitive solutions.

#### **4.3.3 Complete Streets – Integrating the Transportation System**

Complete Streets begins a methodology to improve traveler safety by designing roadways with new innovative basic elements of design that make the street system more attractive to pedestrians, bicyclists and transit users. Complete streets can serve to help communities develop a healthy and active lifestyle and move toward innovative ways to reduce traffic congestion, and make local trips more attractive to the public for using other options such as taking transit, bicycling and walking.

Caltrans views all transportation improvements as opportunities to improve safety, access and mobility for all travelers in California and recognizes bicycle, pedestrian and transit modes as integral elements of the Deputy Directive 64-R1, *Complete Streets-Integrating the Transportation System*, as policy to develop integrated multimodal projects in balance with community goals, plans and values. By creating “complete streets” early in the system planning process, a transportation facility that is planned, designed, operated and maintained to provide safe mobility for all users will ensure that travelers of all ages and abilities can move safely and efficiently across a fully integrated transportation network.

## **APPENDIX A**

### **Level of Service Definitions**

The LOS is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. Six levels of LOS can generally be categorized as follows:

**LOS A** describes free flowing conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway.

**LOS B** is also indicative of free-flowing conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.

**LOS C** represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the presence of other vehicles.

**LOS D** demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.

**LOS E** reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.

**LOS F** represents a breakdown or forced flow. It usually occurs at a point on a planned facility when forecast demand exceeds computed capacity.

## **APPENDIX B**

### **GLOSSARY OF TERMS**

AADT	Average Annual Daily Traffic
ACE	Altamont Commuter Express
ATIS	Advanced Traveler Information Systems
BNSF	Burlington Northern Santa Fe Rail Road
CAT	Ceres Area Transit
CAWS	Caltrans Automated Warning System
CCTV	Closed Circuit Television
CEQA	California Environmental Quality Act
CHIN	California Highway Information Network
CHP	California Highway Patrol
CIP	Congestion Improvement Program
CMIA	Corridor Mobility Improvement Account
CMP	Congestion Management Plan
CMS	Changeable Message Sign
CSMP	Corridor System Management Plan
CSS	Context Sensitive Solutions
CTC	California Transportation Commission
DSMP	District System Management Plan
EB	Eastbound
E/O	East Of
EXPW	Expressway
FHWA	Federal Highway Administration
FSP	Freeway Service Patrol
GVC	Great Valley Center
HAR	Highway Advisory Radio
HICOMP	State Highway Congestion Monitoring Program
HOV	High Occupancy Vehicle
I/C	Interchange
ICES	Inter-modal Corridor of Economic Significance
IIP	Interregional Improvement Program
IRRS	Interregional Road System
IT	Information Technology
ITS	Intelligent Transportation Systems
JCT	Junction
LOS	Level of Service
MAX	Modesto Area Express
MPA	Mariposa County
MPA LTC	Mariposa County Local Transportation Commission
MCTC	Madera County Transportation Commission
MER	Merced County
MCAG	Merced County Association of Governments
NB	Northbound

## APPENDIX B

### GLOSSARY OF TERMS CONTINUED

N/O	North Of
NEPA	National Environmental Policy Act
NHS	National Highway System
NTN	National Truck Network
OH	Overhead
OC	Over-crossing
OWP	Overall Work Program
PA&ED	Project Approval and Environmental Document (phase)
PCS	Pavement Condition Survey
PeMS	Performance Measurement System (Detection)
PSR	Project Study Report
RCMP	Regional Congestion Management Plan
ROW	Right-of-Way
RTE	Route
RTIF	Regional Transportation Impact Fee
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWIS	Roadside Weather Information System
SACOG	Sacramento Area Council of Governments
SAFETY-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SB	Southbound
SHOPP	State Highway Operations Protection Program
SJRRC	San Joaquin Regional Rail Commission
SJRTD	San Joaquin Regional Transit District
SJV	San Joaquin Valley
S/O	South Of
SOP	Status of Projects
SOV	Single Occupancy Vehicle
SP	Southern Pacific Rail Road
SR	State Route
STA	Stanislaus County
STAA	Surface Transportation Assistance Act
STANCOG	Stanislaus Council of Governments
STARNET	Sacramento Transportation Area Network
StaRT	Stanislaus Regional Transit
STIP	State Transportation Improvement Program
STRAIN	Structures Replacement and Improvement Needs
STRAHNET	Strategic Highway Network
TA	Terminal Access
TASAS	Traffic Accident Surveillance and Analysis System
TBD	To Be Determined

**APPENDIX B**  
**GLOSSARY OF TERMS CONTINUED**

TCR	Transportation Concept Report
TDM	Transportation Demand Management
TCTC	Tuolumne County Transportation Council
TMC	Transportation Management Center
TMS	Traffic Monitoring Station or Transportation Management System
TSDP	Transportation System Development Plan
UC	Under-crossing
UP	Union Pacific Rail Road
UPRR	Union Pacific Rail Road
UTC	Ultimate Transportation Corridor
VMT	Vehicle Miles Traveled
WB	Westbound
W/O	West Of



## **APPENDIX C**

### **Rural, Urban and Urbanized Definitions**

The rural, urban and urbanized area limits are based upon population density as determined by the U.S. Census Bureau. The criteria are:

**Rural** – Under 5,000 population

**Urban** – 5,000 to 49,999 population

**Urbanized** – over 50,000 population

## APPENDIX D

### Environmental Information:

#### Air Quality Definitions

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or non-attainment.
- **Attainment:** a pollutant is designated attainment if the state standard for that pollutant was not violated at any site in the area during a three-year period.
- **Non-attainment:** a pollutant is designated non-attainment if there was at least one violation of a State standard for the pollutant in the area.
- **Non-attainment/Transitional:** a sub-category of the non-attainment designation. An area is designated non-attainment/transitional to signify that the area is close to attaining the standard for that pollutant.

#### Environmental Status Definitions

**Flood Plains:** Flood data from FEMA Digital Q3 Data Mapping and identification whether or not areas are within 100 or 500 year floodplain.

**Jurisdictional Waters of the U.S.** (including wetlands): are described as those that are under federal and/or state regulatory authority. Waters of the U.S. include essentially all surface waters such as navigable waters and their tributaries, all interstate waters and their tributaries all wetlands adjacent to these waters, and all impoundments of these waters. Wetland data obtained from the U.S. Fish and Wildlife Service national Wetland Inventory Mapping, previous survey data, or other in office sources. Army Corps of Engineer and EPA definition of wetlands is: those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

**Special Status Species:** Species that are legally protected under federal and state Endangered Species Acts or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing.

- Species listed or proposed for listing as threatened or endangered under the federal or state Endangered Species Act (50 CFR 17.12 and 14 CCR 670.5);
- Species that are federal candidates for possible future listing under the federal Endangered Species Act;
- Species listed as Federal Species of Concern;
- Species that meet the definition or are endangered under the California Environmental Quality Act (CEQA), State CEQA guidelines, section 15380.
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq).

## **APPENDIX D CONTINUED**

### **Environmental Information:**

#### **Environmental Status Definitions**

- Plants considered by the California Native Plant Society (CNPS) to be “rare, threatened, or endangered in California (Lists 1A and 2 in Skinner and Pavlik 1994).”
- Plants listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4 in Skinner and Pavlik 1994), which may be included on the basis of local significance or recent biological information;
- A Bureau of Land Management, U.S. Fish and Wildlife Service, or U.S. Forest Service Sensitive Species.

# STATE ROUTE 120 - SAN JOAQUIN COUNTY - SEGMENT 1

## APPENDIX E-1

### Programmed Projects:

- (Post Mile, Description, Designation)
- 1- PM R1.76 CWS/CCTV, Use - Highway Advisory - Wyche Overhead, Direction EB; SHOPP
- 2- PM R3.4-R5.2 Reconstruct Interchange - SR-120 & Union Rd. Interchange; Local
- 3- PM 5.65 HAR/Support EMS signs on SR-99; RIP/99 Bond, Measure, Oversight
- 4- PM 6.5 Improve STAA Truck Turning Radius; SHOPP Minor A

### Planned Projects:

- (Post Mile, Description, Designation)
- 1-PM 0.0: New Branch connection (2-lane structures) 1-5/SR-120 SR-120 West to I-5 North, and I-5 South to SR-120 East; TBD
- 2- PM 0.00-6.87: Widen from 4-6 lanes (inside shoulder); Measure
- 3- PM 0.49-6.87: Planned Park and Ride Facility; Manteca Widening Project - SR-120 between I-5 and SR-99;TBD
- 4- PM 0.49-6.87: Planned Park and Ride Facility; Manteca Widening Project - SR-120 between I-5 and SR-99;TBD
- 5- PM 0.49-6.87: Planned Park and Ride Facility; Manteca Widening Project - SR-120 between I-5 and SR-99;TBD
- 6- PM 0.49-6.87: Planned Park and Ride Facility; Manteca Widening Project - SR-120 between I-5 and SR-99;TBD
- 7- PM 0.493: Planned Detention; EB SR-120 E/O Mossdale, JCT I-5; SHOPP
- 8- PM 0.493: Planned Detention; WB SR-120 W/O Mossdale, JCT I-5; SHOPP
- 9- PM R1.188-R1.510: Reconstruct Interchange; SR-120@Yosemite/Guthmiller Interchange; TBD
- 10- PM R1.133: Planned Park and Ride Facility; Lathrop/Manteca Interchange - SR-120 at Yosemite Ave.; TBD
- 11- PM R2.23: Planned Park and Ride Facility; Manteca Interchange - SR-120 at McKinley Ave.; TBD
- 12- PM R2.287: Class I Bicycle Lane; Manteca; McKinley Ave. from Wawona St. to Woodward Rd. (Crossing SR-120); TBD
- 13- PM R2.295: Reconstruct Interchange including necessary Auxiliary Lanes; SR-120 & McKinley Ave.; TBD
- 14- PM R3.073: Class II Bicycle Lane; Manteca - Airport Was - Northern City Limits to Southern City Limits (Crossing SR-120); TBD
- 15- PM R3.00-R3.60: Reconstruct Interchange - SR-120 & Airport Way; TBD
- 16- PM R3.00-R3.60: Oversight over Interchange Modifications - SR-120 & Airport Way; TBD
- 17- PM R3.38: Class II Bicycle Lane; Airport Way from French Camp Rd. to Durham Ferry Rd.; TBD
- 18- PM R3.577: Class I Bicycle Lane; Manteca- Union St. from Atherton Dr. to Daniels St. (Crossing SR-120); TBD
- 19- PM R5.278: Reconstruct Interchange - SR-120 & Main St.; TBD
- 20- PM R5.054: Class I Bicycle Lane - Manteca - Main St. from East Woodward Ave. to Industrial Park Dr. (Crossing SR-120); TBD
- 21- PM R5.50: EMS- Highway Advisory Radio Support; Main St.; SHOPP
- 22- PM R5.70: CCTV - Traffic Monitoring; S. Main St. EBMWB; SHOPP
- 23- PM R6.134: Class I Bicycle Lane; Manteca - Spreckles Ave. East Atherton Dr. to Yosemite Ave.; TBD

### Travel Forecast Data

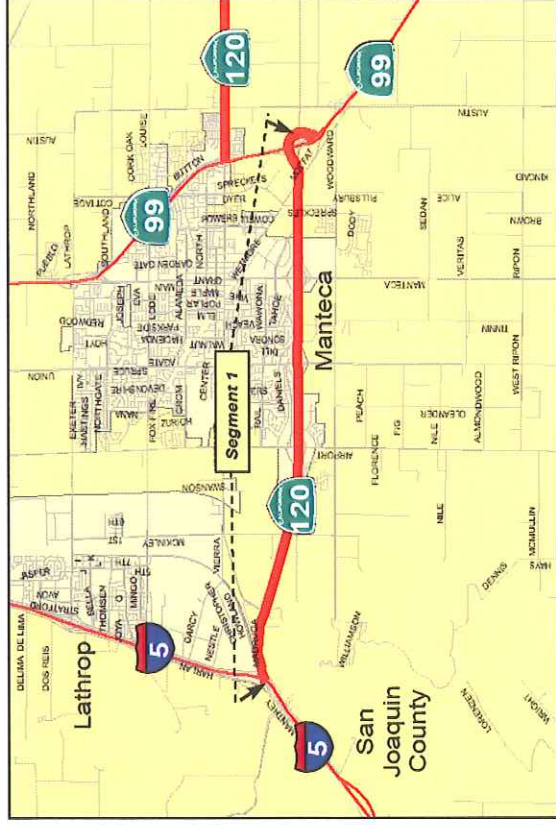
Existing Facility: Four-Lane Freeway		Base Free Flow Speed: 75	
Level of Service:		E	
Volume/Capacity:		0.93	
Average Daily Traffic:		67,800	
Peak Hour Volume:		5,400	
Peak Hour Directional Split:		60/40	
Truck Volume % of Total Truck ADT:		14	
Level of Service:		F	
Volume/Capacity:		1.07	
Average Daily Traffic:		78,600	
Peak Hour Volume:		7,450	
Peak Hour Directional Split:		60/40	
Truck Volume % of Total Truck ADT:		14	
Actual Accident Rate		Statewide Average	
Fatal & Injury		0.24	
Total (Includes Property Damage)		0.66	
3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/1/06 to 12/31/08			

### Traffic Collision Rate (Average collision rates statewide for this type facility)

Actual Accident Rate		Statewide Average	
Fatal & Injury		0.24	
Total (Includes Property Damage)		0.66	
3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/1/06 to 12/31/08			

### Segment Route Concept

Environmental Status			
		Degree of Impact	Degree of Impact
Flood Plains:	N/A		High
Wetlands:	Moderate		Low
Special Status Species:	Moderate		Moderate
* See Appendix – for explanation of environmental status			
Air Quality			



### Segment Location:

Description:		I-5 to SR-99	
Post Mile:		0.00-16.872	
Length:		6.872 miles	
Functional Classification:		Principal Arterial	
Number of Lanes:		four-lane	
Terrain:		Level	
Accessible to Bicycles:		No	
Right of Way Width:		250-400 Feet	
Shoulder Width:		6-10 Feet	
Median Width:		6-99 Feet	
Local Planning Jurisdiction:		Manteca/Lathrop San Joaquin Council of Governments	
Functional Classification:		Principal Arterial	
Facility Type:		4-Lane Freeway	
Interregional Road System:		Yes	
High Emphasis Route:		Yes	
Focus Route:		No	
Freeway Agreement:		10-SJ-120-No. 5	
9/2/1980		PM 0.0-4.8/PM 5.3-7.3	
Functional Classification:		Principal Arterial	
Facility Type:		4-Lane Freeway	
Interregional Road System:		Yes	
High Emphasis Route:		Yes	
Focus Route:		No	
Freeway Agreement:		10-SJ-120-No. 5	
9/2/1980		PM 0.0-4.8/PM 5.3-7.3	

### Route Designations

Trucking Network: Terminal Access (STAA)		Yes	
Degree of Impact		High	
Cultural Resources:		Low	
Leaking Underground Tanks:		Moderate	
Possible Hazardous Waste:			
Degree of Impact		High	
Cultural Resources:		Low	
Leaking Underground Tanks:		Moderate	
Possible Hazardous Waste:			

### Environmental Status

Environmental Status			
		Degree of Impact	Degree of Impact
Flood Plains:	N/A		High
Wetlands:	Moderate		Low
Special Status Species:	Moderate		Moderate
* See Appendix – for explanation of environmental status			
Air Quality			

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.



## STATE ROUTE 120 - SAN JOAQUIN COUNTY - SEGMENT 2

## APPENDIX E-2

## Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.

## Planned Projects:

(Post Mile, Description, Designation)

- 1-PM 6.24-21.18: Escalon Bypass and Alternate Alignment - SR-120 between SR-99 and Stanislaus Co. Line: TBD
- 2-PM 6.76: Class III Bicycle Route - Austin Rd. from French Camp Rd. to Caswell Memorial State Park/Stanislaus River: TBD
- 3-PM 6.638: Class II Bicycle Lane - SR-120 from W/O SR-99 to E/O SR-99: TBD
- 4-PM 6.779-21.18: Class III Bicycle Route - SR-120 from Austin Rd. to Stanislaus County Line: TBD



## Segment Location:

Description: Junction SR-99 S. to Austin Rd.

Post Mile: 6.2-6.83

Length: 0.63 miles

Functional Classification: Other Principle Arterial

Rural/Urban/Urbanized: Urban

Within City Limits: Manteca

Local Planning Jurisdiction: San Joaquin Council of Governments

## Roadbed Information

Number of Lanes: Four-lane

Lane Width: 11-12 Feet

Right of Way Width: 60-100 Feet

Shoulder Width: 0-8 Feet

Accessible to Bicycles: Yes

Median Width: 0-12 Feet

Level: Level

Yes

No

Focus Route: No

Freeway Agreement: 10-SJ-120-No. 5

National Highway System: Yes

9/2/1980 PM 5.3-7.3

## Route Designations

Functional Classification: Other Principle Arterial

Facility Type: 4-Lane Conventional Highway

Interregional Road System: Yes

High Emphasis Route: Yes

Focus Route: No

Freeway Agreement: 10-SJ-120-No. 5

National Highway System: Yes

## Environmental Status

Degree of Impact: Moderate

Cultural Resources: Moderate

Leaking Underground Tanks: High

Possible Hazardous Waste: Low

Special Status Species: Moderate

\* See Appendix - for explanation of environmental status

Air Quality

Particulate Matter

PM 10

Maintenance

Non-attainment

Carbon Monoxide

Maintenance

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

## Travel Forecast Data

Existing Facility: Four-Lane Conventional Highway

Base Free Flow Speed: 45

Level of Service: B

Volume/Capacity: 0.295

Average Daily Traffic: 16,400

Peak Hour Volume: 1,600

Peak Hour Directional Split: 60/40

Truck Volume % of Total Truck ADT: 15

2015 without Improvement

2030 without Improvement

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate

Fatal &amp; Injury

Total (includes Property Damage)

Rate





## APPENDIX E-4

**Programmed Projects:**

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.

**Planned Projects:**

(Post Mile Description Designation)

1-PM 13.0: CMS-Highway Advisory - SR-120 @ Carrolton Rd. - Direction WB: SHOPP



Segment Location:			Travel Forecast Data			
Description:	French Camp Rd. to Brennan Rd.		Existing Facility: Two-Lane Conventional Highway			
Post Mile:	11.64-15.86		Base Free Flow Speed: 65			
Length:	4.22 miles					
Functional Classification:	Other Principle Arterial					
Roadbed Information						
Number of Lanes:	Four-lane	Lane Width:	12 Feet			
Terrain:	Level	Right of Way Width:	60-140 Feet			
Accessible to Bicycles:	Yes	Shoulder Width:	11 Feet			
		Median Width:	0 Feet			
Route Designations						
Functional Classification:	Other Principal Arterial	Trucking Network: Terminal Access (STAA)				
Facility Type:	Two-Lane Conventional Highway					
Interregional Road System:	Yes					
High Emphasis Route:	Yes					
Focus Route:	No					
Freeway Agreement:	3/24/1993 PM 7.5-20.8	National Highway System:	Yes			
Environmental Status						
	Degree of Impact	Degree of Impact				
Flood Plains:	N/A	Cultural Resources:	Moderate			
Wetlands:	Low	Leaking Underground Tanks:	Moderate			
Special Status Species:	Low	Possible Hazardous Waste:	Low			
* See Appendix – for explanation of environmental status						
Air Quality						
	PM 10	Particulate Matter	2.5	Carbon Monoxide		
Ozone						
Non-attainment	Non-Attainment/Maintenance		Non-Attainment	Non-Attainment/Maintenance		
NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.						



## STATE ROUTE 120 - SAN JOAQUIN COUNTY - SEGMENT 5

## APPENDIX E-5

**Programmed Projects:**

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.

**Planned Projects:**

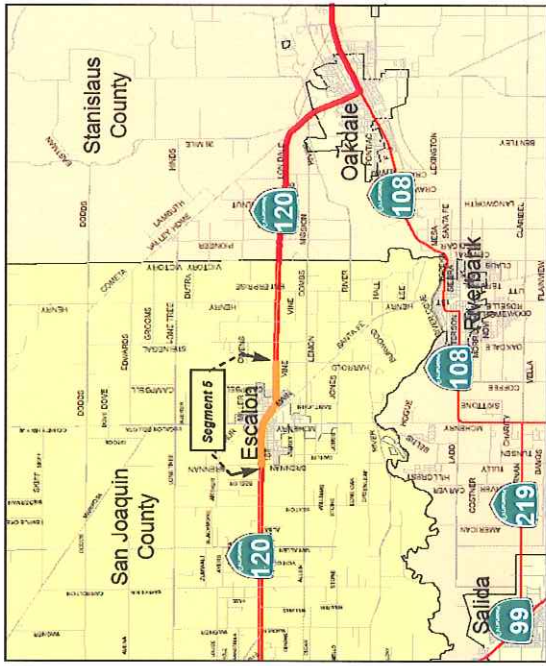
(Post Mile Description Designation)

1-PM 16.0: CMS - Highway Advisory - SR-120 @ Brennan Ave - Direction EB: SHOPP

2- PM 16.678-17.225: Caltrans intercity rail/rail corridor improvements - San Joaquin County between Escalon and Stockton: TBD

3- PM 16.678-17.225: Construct grade separation or at-grade improvements - In City of Escalon at BNSF railway crossing TBD

4-PM 15.86 Traffic light at Brennan Rd.



## Segment Location:

Description:	Brennan Rd. to Harrold Rd
--------------	---------------------------


Post Mile:	15.86-18.69
------------	-------------

Length:	2.83 miles
---------	------------

**Functional Classification:**

# Road

## Lane Width:

<b>Terrain:</b>	<b>Level</b>
-----------------	--------------

Accessible to Bicycles:	Yes
-------------------------	-----


---

--	--

## Route Designations

Functional Classification:	Other Principle Arterial
----------------------------	--------------------------

Facility Type:	Four-Lane Conventional Hg
----------------	---------------------------

Interregional Road System:	Yes
----------------------------	-----

High Emphasis Route:	Yes

Focus Route:	No
--------------	----

Freeway Agreement:	10-SJ-120-No. 2
--------------------	-----------------

3/24/1969 PM 7.3-20.8

ENVI

act	Cultural Bo
-----	-------------

1000 P. 111111.	1/2
-----------------	-----

Wetlands: Low

201	201
-----	-----

Special Status Species: Low

## \$15

© 2006 The Authors  
Journal compilation © 2006 Blackwell Publishing Ltd

Page	1
------	---

Ozone	
PM 10	

Non-attainment	Non-attainment/Maintenance
----------------	----------------------------

--	--	--	--	--

## STATE ROUTE 120 - SAN JOAQUIN COUNTY - SEGMENT 6

## APPENDIX E-6

## Programmed Projects:

(Post Mile, Description, Designation)  
There are no programmed projects in this statement at this time.

## Planned Projects:

(Post Mile, Description, Designation)  
1-PM 17.104-18.691; Widen to 5-lane conventional highway to Stanislaus County Line - East of Escalon, McHenry Rd. to existing SR-120 at Harrold Ave.; TBD



## Segment Location:

Description: Harrold Rd. to Stanislaus County Line

Post Mile: 18.65-21.18  
Length: 2.49 miles  
Rural/Urban/Unincorporated: No  
Within City Limits: San Joaquin Council of Governments

Functional Classification: Other Principal Arterial  
Local Planning Jurisdiction: Roadbed Information

Number of Lanes: Two-Lane  
Level: 12-20 Feet  
Right of Way Width: 50-60 Feet  
Shoulder Width: 0-7 Feet  
Median Width: 0 Feet

Accessible to Bicycles: Yes

Freeway Agreement: 10-SJ-20-No. 2

Freeway Agreement: 32/4/1993 PM 7.3-20.8

Functional Classification: Principal Arterial

Facility Type: 4-Lane Freeway

Interregional Road System: Yes

High Emphasis Route: Yes

Focus Route: No

National Highway System: Yes

Trucking Network: Terminal Access (STAA)

Degree of Impact: Moderate

Cultural Resources: Low

Leaking Underground Tanks: Low

Possible Hazardous Waste: Low

Special Status Species: Moderate

\* See Appendix - for explanation of environmental status

Air Quality

Particulate Matter

PM 10

Non-attainment

Attainment/Maintenance

Carbon Monoxide

2.5

Non-Attainment

Attainment/Maintenance

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

## Travel Forecast Data

Existing Facility: Two-Lane Conventional Highway

Base Free Flow Speed: 65

2007 Existing Facility

2015 without improvement

2030 without improvement

Level of Service: D

Volume/Capacity: 0.52

Average Daily Traffic: 12,100

Peak Hour Volume: 1,500

Peak Hour Directional Split: 60/40

Truck Volume % of Total Truck ADT: 10

10

10

Rate

Statewide Average

Fatal & Injury

Total (includes Property Damage)

Rate

0.25

0.59

0.33

0.78

Concept Level of Service: C

Concept Facility (2030): Four-Lane Conventional Highway

Ultimate Transportation Corridor: TBD

Comments:

A Four-lane conventional highway or expressway is needed to meet Concept LOS "C" in rural and LOS "D" in urban areas. For rural two-lane highways with lower ADT, special emphasis should be placed on identifying lower cost improvements, such as truck climbing and passing lanes, and channelizing in lieu of recommending an expressway.

3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/1/05 to 12/31/08

Segment Route Concept



## APPENDIX F-1

### Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.

**Planned Projects:**

(Past Mile, Description, Designation)

- 1-PM 0 0.4-321; Bicycle Facility, Class II or III San Joaquin County Line to City of Oakdale City Limits; TBD  
2-PM R2-80; CMS/TMS - Highway advisory W/O Valley Home Rd.; SHOPP  
3-PM 3.16; Planned Detection - EB W/O SR-120 W/O Valley Home Rd.; SHOPP  
4-PM 3.16; Planned Detection - WB SR-120 W/O Valley Home Rd.; SHOPP  
5-PM 3.16-TBD; Construct 2-lane expressway from Valley Home Rd to East of Oakdale; TBD  
6-PM 3.32-12.9; Planned Park n Ride - between Valley Home Rd and Lancaster Rd  
7-PM 3.32-32; Planned Park n Ride - between Valley Home Rd and Lancaster Rd  
8-PM 3.32-32; Bikeway Stripling Class I/II, Class III, 26 Mile Rd from SR-120 to Dorsey Rd.; TBD

**Segment Location:**

<b>Description:</b>	San Joaquin County Line to Valley Home Rd.
---------------------	--

Post Mile:	PM 0.00-3.46	Rural/Urban/Urbanized:
------------	--------------	------------------------

<b>Length:</b>		
<b>Length:</b>	3.46 Miles	<b>Within City Limits:</b>

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Functional Classification:	Other Principal Arterial	Local Planning Jurisdiction
----------------------------	--------------------------	-----------------------------

### Roadbed Information

Number of Lanes:	Two-Lane	Lane Width:
------------------	----------	-------------

Level	Right or way width:
Yes	Shoulder Width:
Accessible to Bicycles:	

Accessible to bicycles.	100	Median Width:
		Shoulder Width:

STATE OF MICHIGAN		
IN SENATE,		
JANUARY 11, 1906.		

[illegible]

### Route Designations

Functional Classification:	Other Principal Arterial	Trucking Network: Term
----------------------------	--------------------------	------------------------

Facility Type:	Expressway
----------------	------------

Interregional Road System:	Yes
Inter-Province Route:	Yes

High Emphasis Route:	Yes
Focus Route:	No

Freeway Agreement:	10-STA-120-No.4	National Highway System
--------------------	-----------------	-------------------------

8/15/1968	PM 0.0-4.7
-----------	------------

### Environmental Status

	Degree of Impact
--	------------------

<b>Flood Plains:</b>	N/A	<b>Cultural Resources:</b>
----------------------	-----	----------------------------

[illegible]

<b>Wetlands:</b>	Moderate	Leaking Underground T
------------------	----------	-----------------------

100

Special Status Species:	Low	Possible Hazardous Waste
-------------------------	-----	--------------------------

\* See Appendix -- for explanation of environmental status

**Air Quality**

Ozone		
Particulate Matter	PM 10	2.5

6.7	FW TO	Non-attainment	Non-attainment
	Attainment Maintenance		

Non-attainment	Attainment-Maintenance	Non-attainment

\* NOTE: This information is for overview purposes only and does not replace a full report from

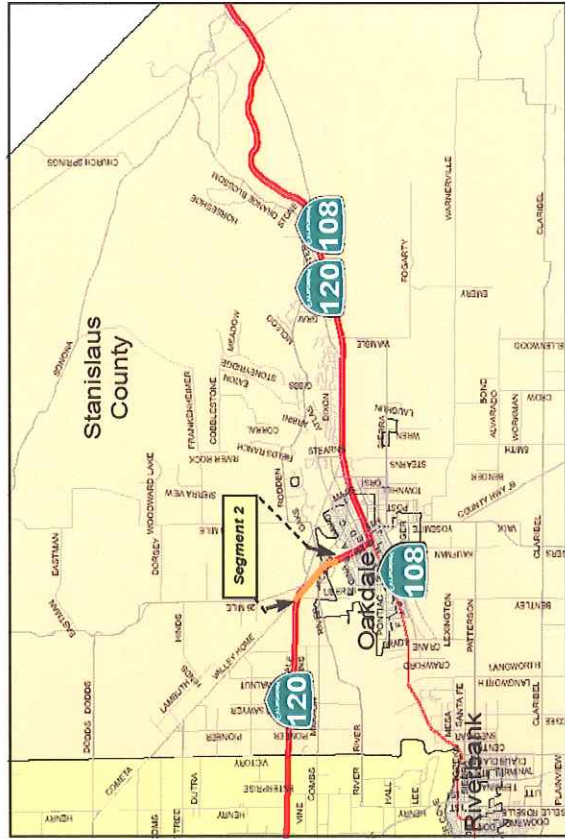
[illegible]



## STATE ROUTE 120 - STANISLAUS COUNTY - SEGMENT 2

## APPENDIX F-2

**Programmed Projects:**

[illegible]**Planned Projects:**[illegible]

**Segment Location:**

Cognate Location			
Description:	Valley Home Rd. to Stanislaus River		
Post Mile:	PW 3.46-4.26		
Length:	0.8 Miles	Rural/Urban/Urbanized:	Urban
		Within City Limits:	No
Functional Classification:	Other Principal Arterial	Stanislaus Council of Governments	
		Local Planning Jurisdiction:	
Roadbed Information			
Number of Lanes:	Two-Lane	Lane Width:	12 Feet
Terrain:	Level	Right of Way Width:	80 Feet
Accessible to Bicycles:	Yes	Shoulder Width:	10 Feet
		Median Width:	0 Feet

## Route Designations

Route Designations		Trucking Network: Terminal Access (STAA)
<b>Functional Classification:</b>	Other Principal Arterial	
<b>Facility Type:</b>	Conventional	
<b>Interregional Road System:</b>	Yes	
<b>High Emphasis Route:</b>	Yes	
<b>Focus Route:</b>	No	
<b>Freeway Agreement:</b>	1-S/A-120-No. 4 B/M/J/O-43	National Highway System: Yes

## Environmental Status

Environmental Status		
	Degree of Impact	Degree of Impact
Flood Plains:	100 Year at Stanislaus River	Cultural Resources: High
Wetlands:	Moderate	Leaking Underground Tanks: Low
Special Status Species:	Moderate	Possible Hazardous Waste: Low

## us

Air Quality			
Overall Population - 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th	Ozone	PM 10	Particulate Matter
			2.5
	Non-attainment	Attainment-Maintenance	Non-attainment
			Carbon Monoxide
			Attainment-Maintenance

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

## Travel Forecast Data

Existing Facility: Two-Lane Conventional Highway			
Base Free Flow Speed: 60			
	2007 Existing Facility	2015 without Improvement	2030 without Improvement
Level of Service:	E	F	F
Volume/Capacity:	0.88	1.1	1.37
Average Daily Traffic:	20,600	23,900	30,100
Peak Hour Volume:	2,500	3,125	3,905
Peak Hour Directional Split:	60/40		
Truck Volume % of Total Truck ADT:	15		
<b>Traffic Collision Rate (Average collision rates statewide for this type facility)</b>			
Actual Accident Rate	Rate	Statewide Average	Rate
Fatal & Injury	0.61	Fatal & Injury	0.52
Total (Includes Property Damage)	1.8	Total (Includes Property Damage)	1.8

**Segment Route Concept**

Logistics Route Concepts	
Concept Level of Service:	C
Concept Facility (2030):	Two-Lane Conventional
Ultimate Transportation Corridor:	Two-Lane Conventional
Comments:	
Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.	

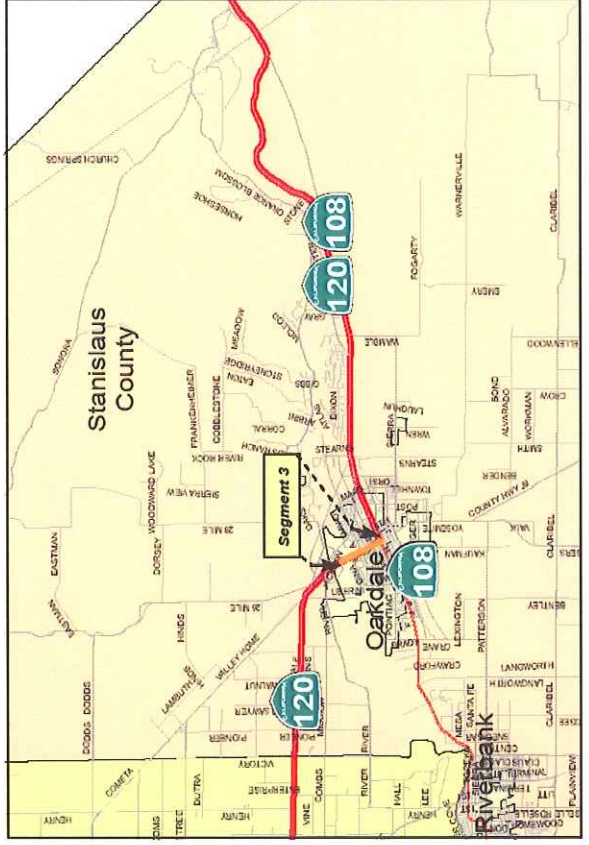
## STATE ROUTE 120 - STANISLAUS COUNTY - SEGMENT 3

## APPENDIX F-3

## Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.



## Planned Projects:

(Post Mile, Description, Designation)

- 1-PM 4.346: Planned Detection - EB SR-120 W/O Oakdale, A St.; SHOPP
- 2-PM 4.346: Planned Detection - WB SR-120 W/O Oakdale, A St.; SHOPP
- 3-PM 4.346: Planned Detection - EB SR-120 E/O Oakdale, A St.; SHOPP
- 4-PM 4.346: Planned Detection - WB SR-120 E/O Oakdale, A St.; SHOPP
- 5-PM 5.116: Planned Detection - EB SR-120 E/O Oakdale, West JCT SR-108; SHOPP
- 6-PM 5.116: Planned Detection - WB SR-120 E/O Oakdale, West JCT SR-108; SHOPP
- 7-PM 5.116: Planned Detection - EB SR-120 W/O Oakdale, West JCT SR-108; SHOPP
- 8-PM 5.116: Planned Detection - WB SR-120 W/O Oakdale, West JCT SR-108; SHOPP
- 9-PM 5.116-5.91: Bicycle Facility Class II - SR-120 from Oakdale City Limits to SR-108; TBD
- 10-PM 5.116-5.396: Bicycle Facility - Class II or Class III SR-120 from S. Yosemite Ave. to East Ave.; TBD

## Travel Forecast Data

Existing Facility: Four-Lane Conventional Highway

Base Free Flow Speed: 45

	2007 Existing Facility	2015 without Improvement	2030 without Improvement
Level of Service:	C	C	D
Volume/Capacity:	0.46	0.57	0.77
Average Daily Traffic:	20,700	25,700	35,000
Peak Hour Volume:	2,500	3,100	4,200
Peak Hour Directional Split:	60/40		
Truck Volume % of Total Truck ADT:	13		

## Traffic Collision Rate (Average collision rates statewide for this type facility)

Actual Accident Rate	Rate	Statewide Average	Rate
Fatal & Injury	1.08	Fatal & Injury	1.08
Total (Includes Property Damage)	3.01	Total (Includes Property Damage)	2.81

3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/01/06 to 12/31/08

## Segment Route Concept

Concept Level of Service:	C
Concept Facility (2030):	Two-Lane Conventional
Ultimate Transportation Corridor:	Two-Lane Conventional
Comments:	

Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.

## Segment Location:

Description: Stanislaus River to Jct. SR-108

Post Mile:	PM 4.26-5.12	Rural/Urban/Urbanized:	Urban/Rural
Length:	0.86 Miles	Within City Limits:	Partially
Functional Classification:	Other Principal Arterial	Local Planning Jurisdiction:	Stanislaus Council of Governments

## Roadbed Information

Number of Lanes:	Four-Lane	Lane Width:	11-12 Feet
Terrain:	Flat	Right of Way Width:	80 Feet
Accessible to Bicycles:	Yes	Shoulder Width:	0-11 Feet
		Median Width:	0-12 Feet

## Route Designations

Functional Classification:	Other Principal Arterial	Trucking Network:	Terminal Access (STAA)
Facility Type:	Conventional		
Interregional Road System:	Yes		
High Emphasis Route:	Yes		
Focus Route:	No		
Freeway Agreement:	10-STA-120 No. 4	National Highway System:	Yes
	8/15/1968 PM0.0-4.7/5.0-6.8		

## Environmental Status

Flood Plains:	Degree of Impact	Cultural Resources:	Degree of Impact
	100 Year at Stanislaus River		Low/Moderate
Wetlands:	Moderate	Leaking Underground Tanks:	Moderate
Special Status Species:	Moderate	Possible Hazardous Waste:	Moderate

\* See Appendix - for explanation of environmental status

## Air Quality

Ozone	Particulate Matter	Carbon Monoxide
Non-attainment	PM 10	
	Attainment-Maintenance	Non-attainment
		Attainment-Maintenance

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.



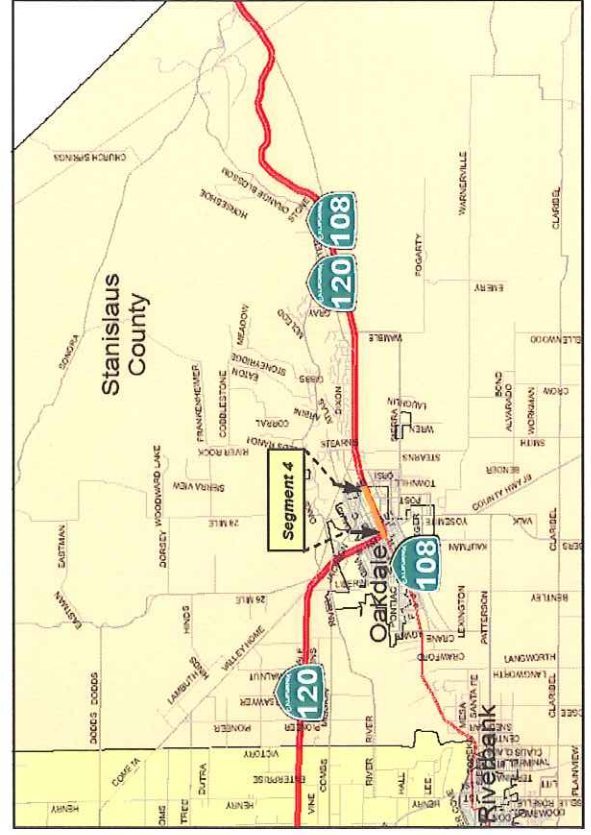
## STATE ROUTE 120 - STANISLAUS COUNTY - SEGMENT 4

## APPENDIX F-4

## Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.



## Planned Projects:

(Post Mile, Description, Designation)

There are no planned projects in this segment at this time.

## Segment Location:

<b>Description:</b>	Jct. SR-108 to Maag	<b>Urban/Rural:</b>	Urban/Rural
<b>Post Mile:</b>	PM 5.12-6.04	<b>Within City Limits:</b>	Partially
<b>Length:</b>	0.92 Miles	<b>Local Planning Jurisdiction:</b>	Stanislaus Council of Governments
<b>Functional Classification:</b>	Other Principal Arterial	<b>Roadbed Information</b>	
<b>Number of Lanes:</b>	Four-Lane	<b>Lane Width:</b>	11-12.5 Feet
<b>Terrain:</b>	Flat	<b>Right of Way Width:</b>	80 Feet
<b>Accessible to Bicycles:</b>	Yes	<b>Shoulder Width:</b>	0-6 Feet
		<b>Median Width:</b>	0-12 Feet
<b>Functional Classification:</b>	Other Principal Arterial	<b>Route Designations</b>	
<b>Facility Type:</b>	Conventional	<b>Trucking Network: Terminal Access (STAA)</b>	
<b>Interregional Road System:</b>	Yes		
<b>High Emphasis Route:</b>	Yes		
<b>Focus Route:</b>	No	<b>National Highway System:</b>	Yes
<b>Freeway Agreement:</b>	10-STA-120 No. 4		
	8/15/1988 PM 5.0-6.3	<b>Environmental Status</b>	
<b>Flood Plains:</b>	N/A	<b>Degree of Impact</b>	Moderate
<b>Wetlands:</b>	Low	<b>Cultural Resources:</b>	Moderate
<b>Special Status Species:</b>	Low	<b>Leaking Underground Tanks:</b>	Low
		<b>Possible Hazardous Waste:</b>	Moderate
<b>Air Quality</b>			
<b>Ozone</b>	PM 10	<b>Particulate Matter</b>	2.5
<b>Non-attainment</b>	Attainment-Maintenance	<b>Carbon Monoxide</b>	Attainment-Maintenance

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

## Travel Forecast Data

Existing Facility: 4-Lane Conventional Highway

Base Free Flow Speed: 45

	2007 Existing Facility	2015 without Improvement	2030 without Improvement
<b>Level of Service:</b>	B	C	D
<b>Volume/Capacity:</b>	0.41	0.5	0.67
<b>Average Daily Traffic:</b>	22,600	28,000	38,200
<b>Peak Hour Volume:</b>	2,300	2,785	3,750
<b>Peak Hour Directional Split:</b>	60/40		
<b>Truck Volume % of Total Truck ADT:</b>	7		
<b>Traffic Collision Rate (Average collision rates statewide for this type facility)</b>			
<b>Actual Accident Rate</b>	<b>Rate</b>	<b>Statewide Average</b>	<b>Rate</b>
<b>Fatal &amp; Injury</b>	1.42	<b>Fatal &amp; Injury</b>	1.02
<b>Total (Includes Property Damage)</b>	4.07	<b>Total (Includes Property Damage)</b>	2.56
<b>3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/01/06 to 12/31/08</b>			
<b>Segment Route Concept</b>			
<b>Concept Level of Service:</b>	C		
<b>Concept Facility (2030):</b>	Two-Lane Conventional		
<b>Ultimate Transportation Corridor:</b>	Two-Lane Conventional		
<b>Comments:</b>	Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.		

**Programmed Projects:**

There are no programmed projects in this segment at this time.

## (Post Mile, Description, Designation)

1-PM9.237; Grade Crossing - RR Crossing Improvements - Wamble Rd from Sierra Rd to Orange Blossom Rd.; TBD

## Travel Forecast Data

Existing Facility: Two-Lane

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1

10

Level of Service:

Level of Service:	
Volume/Capacity:	

Average Daily Traffic:

Peak Hour Volume:

Peak Hour Directional Split

Truck volume % of Total I

Traffic Col/

Actual Accident Rate

### Fatal & Injury

Total (Includes Property Dam

---

--

3-Year Period E

100

Concept Level of Service:	
---------------------------	--

Concept Facility (2030):

100

Ultimate Transportation Co.

Comments:

Due to some issues with the

Due to environmental, right to

in provisions such as left to

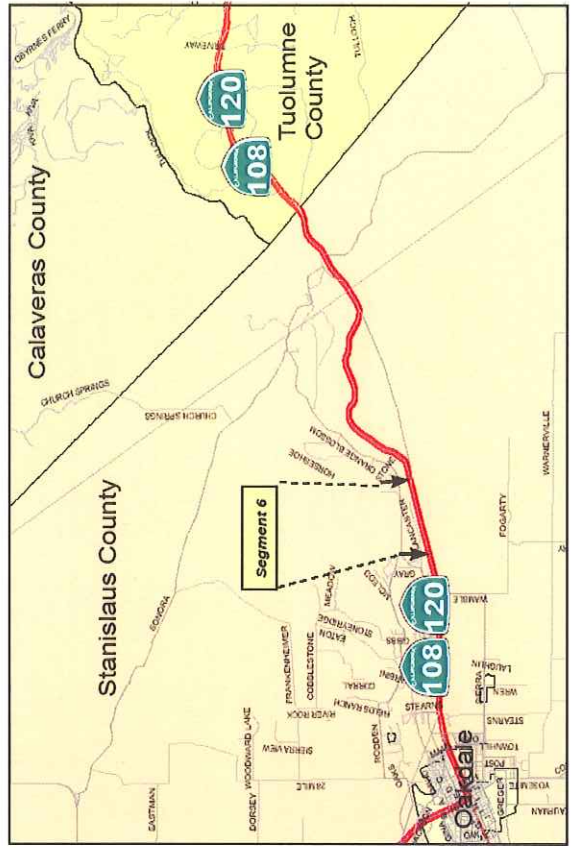
---

--	--

--

**Other Branch or Division.**





Segment Location:				Travel Forecast Data				
Description:	0.87 mi. E. of Wemble Rd. to 0.22 mi. E. of Lancaster Rd.			Existing Facility:				
Post Mile:	PM 10.11-11.63	Rural/Urban/Urbanized:	Rural	Free Flow Speed:				
Length:	1.52 Miles	Within City Limits:	No					
Functional Classification:	Other Principal Arterial	Local Planning Jurisdiction:	Stanislaus Council of Governments					
Roadbed Information								
Number of Lanes:	Two-Lane	Lane Width:	12 Feet	Level of Service:	D	without Improvement		2030 without Improvement
Terrain:	Level	Right of Way Width:	60-170 Feet	Volume/Capacity:	0.56	D		F
Accessible to Bicycles:	Yes	Shoulder Width:	4-8 Feet	Average Daily Traffic:	12,700	15,700		21,500
		Median Width:	0-4 Feet	Peak Hour Volume:	1,600	1,900		2,600
				Peak Hour Directional Split:	60/40			
				Truck Volume % of Total Truck ADT:	10			
Route Designations				Traffic Collision Rate (Average collision rates statewide for this type facility)				
Functional Classification:	Other Principal Arterial	Trucking Network: Terminal Access (STAA)		Actual Accident Rate	Statewide Average		Rate	
Facility Type:	Expressway			Fatal & Injury	Fatal & Injury		0.25	
Interregional Road System:	Yes			Total (Includes Property Damage)	Total (Includes Property Damage)		0.59	
High Emphasis Route:	Yes							
Focus Route:	No							
Freeway Agreement:	10-STIA-120 No. 1	National Highway System:	Yes					
	1/9/1956 PM 7.2-18.16			3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/01/06 to 12/31/08				
Environmental Status				Segment Route Concept				
Flood Plains:	Degree of Impact		Degree of Impact	Concept Level of Service:	C			
Wetlands:	N/A	Cultural Resources:	High	Concept Facility (2030):	Two-Lane Conventional			
Special Status Species:	Low	Leaking Underground Tanks:	Low	Ultimate Transportation Corridor:	Two-Lane Conventional			
* See Appendix -- for explanation of environmental status				Comments:				
Air Quality				Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.				
Ozone	Particulate Matter	PM 10	2.5	Carbon Monoxide				
Non-attainment	Attainment-Maintenance	Attainment-Maintenance	Non-attainment	Attainment-Maintenance				
NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.								



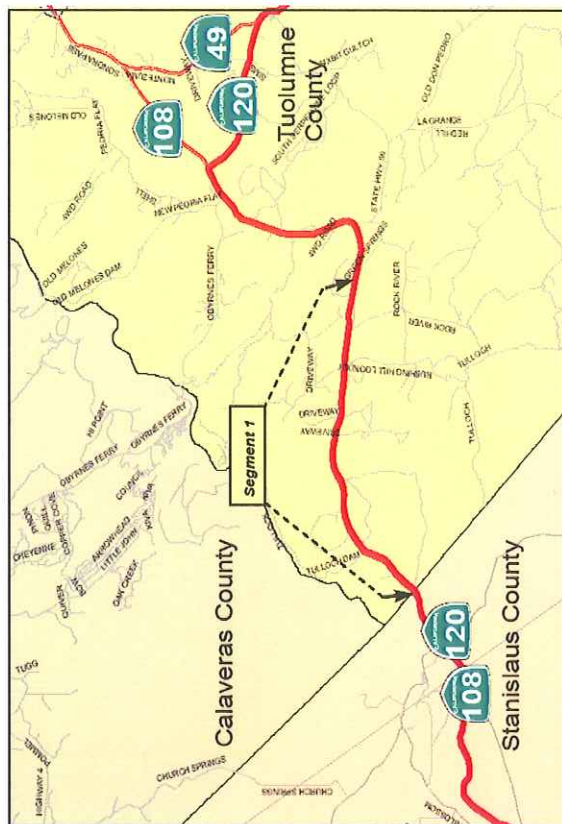


## APPENDIX G-1

### **Programmed Projects:**

(Post Mile, Description, Designation)

1- PM R3.5-6.9. Rehabilitate Pavement on SR-108/SR-120 from near Yosemite JCT to WO La Grange Rd. SHOPP



**Segment Location:**

<b>Description:</b>	From Stanislaus County Line to 0.25 mi. W. of Green Springs Rd.			
<b>Post Mile:</b>	PM R0.00-T6.96	<b>Rural/Urban/Urbanized:</b>	Rural	
<b>Length:</b>	6.96 Miles	<b>Within City Limits:</b>	No	
<b>Functional Classification:</b>	Other Principal Arterial	<b>Local Planning Jurisdiction:</b>	Tulume County Transportation Commission	
<b>Roadbed Information</b>				
<b>Number of Lanes:</b>	Four-Lane	<b>Lane Width:</b>	12 Feet	
<b>Terrain:</b>	Level	<b>Right of Way Width:</b>	260-600 Feet	
<b>Accessible to Bicycles:</b>	Yes	<b>Shoulder Width:</b>	4-10 Feet	
		<b>Median Width:</b>	0-99 Feet	

### Route Designations

Functional Classification:	Other Principal Arterial	
Facility Type:	Expressway	
Interregional Road System:	Yes	
High Emphasis Route:	Yes	
Focus Route:	No	
Freeway Agreement:	10-TUO-120- No. 6	
	12/20/1966	
	PM 0.00-9.0	
National Highway System:	Yes	
Trucking Network: Terminal Access (STAA)		

### Environmental Status

Environmental Data			Degree of Impact	Degree of Impact
Flood Plains:	N/A		Cultural Resources:	High
Wetlands:	High		Leaking Underground Tanks:	Low
Special Status Species:	High		Possible Hazardous Waste:	Low

1000

Air Quality		
Ozone	Particulate Matter	
	PM 10	2.5
Non-attainment - 8 hr. only	Attainment-Unclassified	Attainment-Unclassified
		Carbon Monoxide
		Attainment-Unclassified

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

### Travel Forecast Data

Existing Facility: Four-Lane Expressway			
Base Free Flow Speed: 65			
	2007 Existing Facility	2015 without Improvement	2030 without Improvement
Level of Service:	A	A	A
Volume/Capacity:			
Average Daily Traffic:	13,300	15,400	19,400
Peak Hour Volume:	2,000	2,300	2,800
Peak Hour Directional Split:	75/25		
Truck Volume % of Total Truck ADT:	11		

**Traffic Collision Rate (Average collision rates statewide for this type facility)**

Actual Accident Rate	Rate	Statewide Average	Rate
Fatal & Injury	0.44	Fatal & Injury	0.22
Total (Includes Property Damage)	0.73	Total (Includes Property Damage)	0.55

### Segment Route Concept

Concept Level of Service:	C
Concept Facility (2030):	Two-Lane Conventional
Ultimate Transportation Corridor:	Two-Lane Conventional
Comments:	

Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.

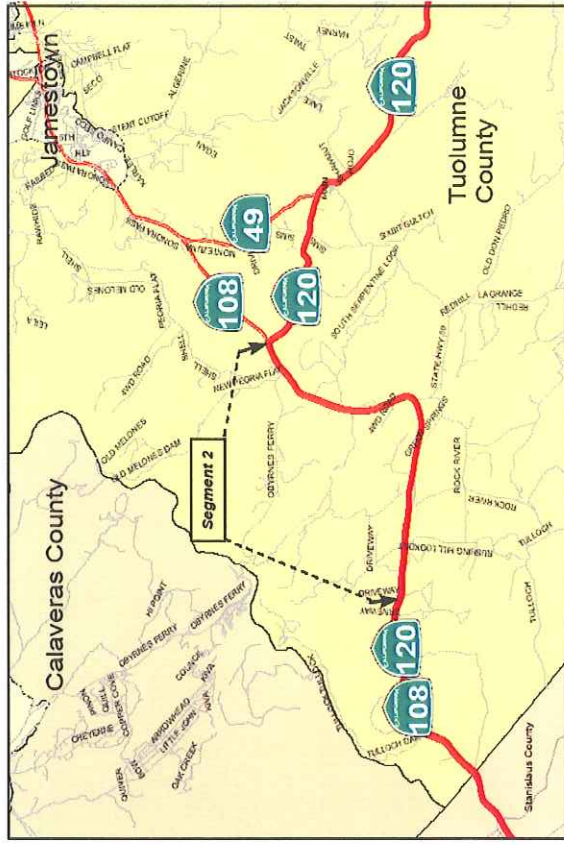


## STATE ROUTE 120 - TUOLUMNE COUNTY - SEGMENT 2

## APPENDIX G-2

## Programmed Projects:

(Post Mile, Description, Designation)  
 1- PM 10.0: Blue/White Information Sign with Flashing Beacon - SR-120 W/O O'Brynes Ferry Rd. SHOPP



## Segment Location:

Description: From 0.25 mi. W. of Green Springs Rd. to Yosemite Junction

Post Mile: PM TS 96-12.07

Length: 5.11 Miles

Functional Classification: Other Principal Arterial

Local Planning Jurisdiction: Tuolumne County

Transportation Commission

Number of Lanes: Two-Lane

Terrain: Rolling

Right of Way Width: 100-300 Feet

Shoulder Width: 3-10 Feet

Accessible to Bicycles: Yes

Median Width: 0 Feet

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

## Travel Forecast Data

Existing Facility: Two-Lane Expressway

Base Free Flow Speed: 65

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

Truck Volume % of Total Truck ADT: 10

Level of Service: E

Volume/Capacity: 16,100

Average Daily Traffic: 18,600

Peak Hour Volume: 2,200

## Route Designations

Trucking Network: Terminal Access (STAA)

Functional Classification: Other Principal Arterial

Facility Type: Expressway

Interregional Road System: Yes

High Emphasis Route: Yes

Focus Route: No

Freeway Agreement: 10-TUO-120 No. 6/No. 11

12-20-1966/1-15-1967/PM 0.00-9.07/0-12.08

National Highway System: Yes

Degree of Impact: High

Cultural Resources: Low

Leaking Underground Tanks: Low/NOA

Possible Hazardous Waste: Low/NOA

Air Quality: Carbon Monoxide

Particulate Matter: 2.5

PM 10: Attainment-Unclassified

Non-attainment - 8 hr. only: Attainment-Unclassified

Attainment-Unclassified: Attainment-Unclassified

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

## Traffic Collision Rate (Average collision rates statewide for this type facility)

Actual Accident Rate

Fatal & Injury

Total (Includes Property Damage)

Rate

0.35

Fatal & Injury

Total (Includes Property Damage)

Rate

0.27

Fatal & Injury

Total (Includes Property Damage)

Rate

0.6

Fatal & Injury

Total (Includes Property Damage)

Rate

0.6

Fatal & Injury

Total (Includes Property Damage)

Rate

0.6

Fatal & Injury

Total (Includes Property Damage)

Rate

0.6

3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/01/06 to 12/31/08

Segment Route Concept

Concept Level of Service: C

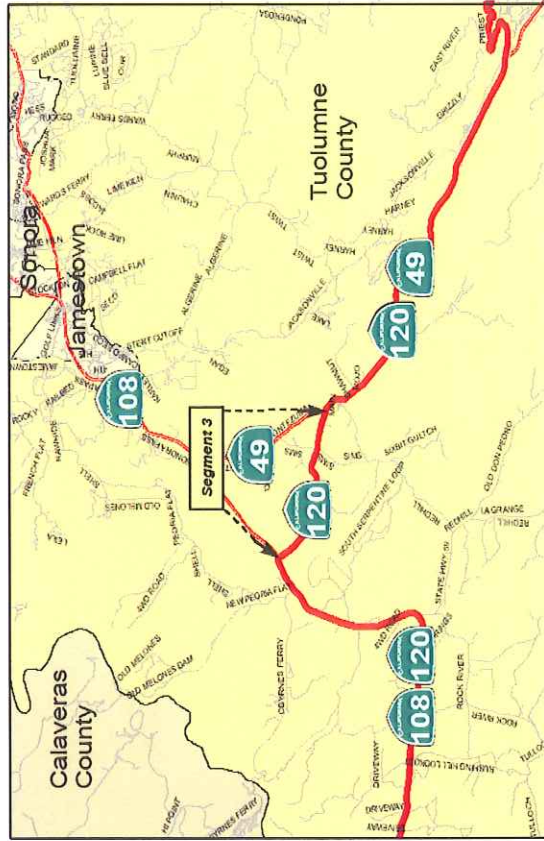
Concept Facility (2030): Two-Lane Conventional

Ultimate Transportation Corridor: Two-Lane Conventional

Comments:

Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.

**Programmed Projects:**



Segment Location:				Travel Forecast Data			
Description:		From Yosemite Junction to Montezuma Rd. N. JCT SR-49		Existing Facility: Two-Lane Conventional Highway			
Post Mile:		PM T12.07-15.52		Base Free Flow Speed: 65			
Length:		3.45 Miles					
Functional Classification:		Other Principal Arterial					
Roadbed Information							
Number of Lanes:		Two-Lane					
Terrain:		Rolling					
Accessible to Bicycles:		Yes					
Route Designations							
Functional Classification:		Other Principal Arterial					
Facility Type:		Conventional					
Interregional Road System:		Yes					
High Emphasis Route:		Yes					
Focus Route:		No					
Freeway Agreement:		10-TUG-120 No. 11/No Number					
1-15-1957/6-26-1962		PM 7.0-12.08/12.08-29.26					
Environmental Status							
Flood Plains:		N/A		Degree of Impact		C	
Wetlands:		Moderate		Cultural Resources:		Two-Lane Conventional	
Special Status Species:		Moderate		Leaking Underground Tanks:		Two-Lane Conventional	
* See Appendix -- for explanation of environmental status		Possible Hazardous Waste:		Ultimate Transportation Corridor:		Comments:	
		Low/NOA				Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.	
Ozone		PM 10		Particulate Matter		Carbon Monoxide	
Non-attainment - 8 hr only		Attainment-Unclassified		Attainment-Unclassified		Attainment-Unclassified	
NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.							



**Programmed Projects:**

1- PM 16.0; Blue/White Information Sign with Flashing Beacon Serves SR-120, SR-108 and SR-49; SHOPP



1-PM R23.89; Planned Detection - EB SR-120 E/O South JCT SR-49; SHOPP  
2-PM R23.89; Planned Detection WB SR-120 E/O South JCT SR-49; SHOPP  
3-PM R23.89; Planned Detection - EB SR-120 W/O South JCT SR-49; SHOPP  
4-PM R23.89; Planned Detection - WB SR-120 W/O South JCT SR-49; SHOPP

### Travel Forecast Data

Base Free Flow Speed: 65

Post Mile:	PM 15.52-23.90	Rural/Urban/Urbanized:
------------	----------------	------------------------

[illegible]

### Roadbed Information

Terrain:	Rolling	Right of Way Width:	140-500'
----------	---------	---------------------	----------

[illegible][illegible]

Functional Classification:	Other Principal Arterial	Terminal Access (STAA)
----------------------------	--------------------------	------------------------

Facility Type:	Expressway
Administrative Need Category:	Yes

High Emphasis Route:	Yes
Focus Route:	No

Freeway Agreement:	10-100-3K-120	National highway system.
	6/26/1062	
	PM 12 08 20 26	

## Environmental Status

<b>Flood Plains:</b>	100 yr at Don Pedro Bridge	<b>Cultural Resources:</b>	High
----------------------	----------------------------	----------------------------	------

Wetlands:	Moderate	Low
Leaking Underground Tanks:		

[illegible]

\* See Appendix -- for explanation of environmental status

	Particulate Matter
--	--------------------

24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

[illegible]

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

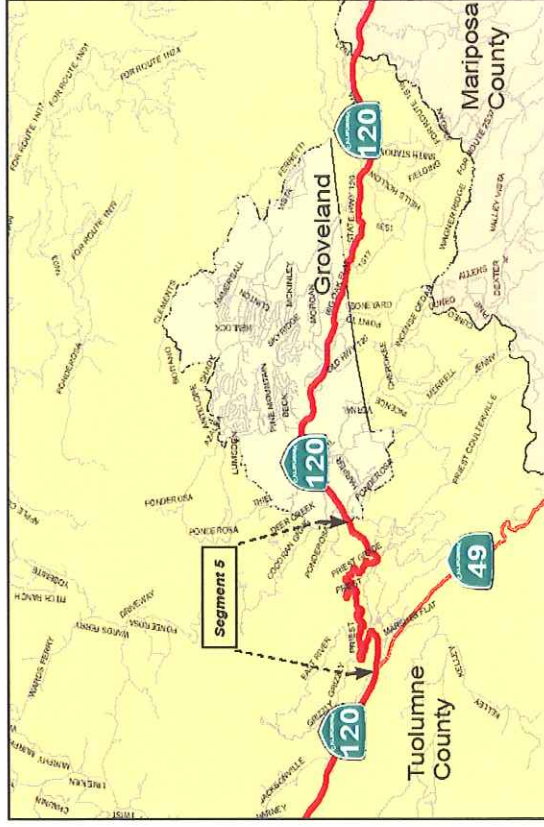
## STATE ROUTE 120 - TUOLUMNE COUNTY - SEGMENT 5

## APPENDIX G - 5

## Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.



## Segment Location:

Description: S. JCT SR-49 to Wards Ferry Rd./Big Oaks Rd.

Post Mile: PM 23.90-30.32

Length: 6.42 Miles

Rural/Urban/Urbanized: Rural

Within City Limits: No

Local Planning Jurisdiction: Tuolumne County Transportation Commission

Functional Classification: Other Principal Arterial

Roadbed Information

Number of Lanes: Two-Lane

Terrain: Rolling

Right of Way Width: 12 Feet

Shoulder Width: 0-8 Feet

Accessible to Bicycles: Yes

Median Width: 0 Feet

## Travel Forecast Data

Existing Facility: Two-Lane Conventional Highway

Base Free Flow Speed: 65

## Planned Projects:

(Post Mile, Description, Designation)

1- PM 24.647-30.370: Widen Roadway and Install Guardrails from Old Priest Grade to Big Oak Rd.; SHOPP

2- PM 29.784: CMS - Highway Advisory - WB W/O Big Oak Flat; SHOPP

3- PM 24.635-30.346: Passing Lanes and Climbing Lanes; TBD

## Traffic Collision Rate (Average collision rates statewide for this type facility)

Actual Accident Rate

Rate

Statewide Average

Rate

Fatal &amp; Injury

0.45

Fatal &amp; Injury

Total (Includes Property

Damage)

0.79

Total (Includes Property

Damage)

1.58

## Segment Route Concept

Concept Level of Service: C

Concept Facility (2030): Two-Lane Conventional

Ultimate Transportation Corridor: Two-Lane Conventional

Comments:

Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational

improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.

## Route Designations

Functional Classification: Other Principal Arterial

Facility Type: Conventional

Interregional Road System: Yes

High Emphasis Route: Yes

Focus Route: No

Freeway Agreement: 10-TUO-120 No #/No #

6-26-1962/6-24-1964

National Highway System: Yes

Trucking Network: Terminal Access (STAA)

## Environmental Status

Degree of Impact

Cultural Resources:

Leaking Underground Tanks:

Possible Hazardous Waste:

Degree of Impact

Cultural Resources:

Leaking Underground Tanks:

Possible Hazardous Waste:

Degree of Impact

Cultural Resources:

Leaking Underground Tanks:

Possible Hazardous Waste:

Degree of Impact

Cultural Resources:

Leaking Underground Tanks:

Possible Hazardous Waste:

Degree of Impact

Cultural Resources:

Leaking Underground Tanks:

Possible Hazardous Waste:

Degree of Impact

Cultural Resources:

Leaking Underground Tanks:

Possible Hazardous Waste:

Degree of Impact

Cultural Resources:

Leaking Underground Tanks:

Possible Hazardous Waste:

Degree of Impact

Cultural Resources:

Leaking Underground Tanks:

## Air Quality

Particulate Matter

PM 10

PM 2.5

Carbon Monoxide

Non-attainment - 8 hr. only

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

Attainment-Unclassified

## \* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.



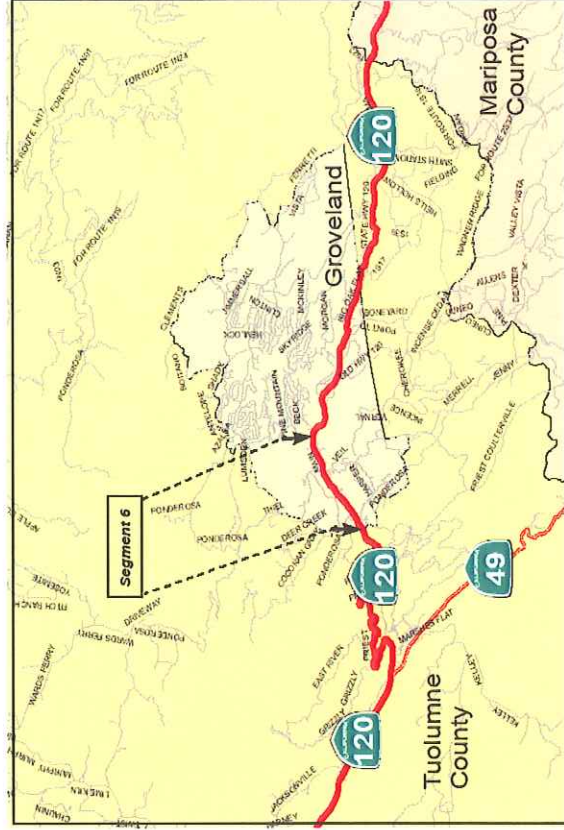
## STATE ROUTE 120 - TUOLUMNE COUNTY - SEGMENT 6

## APPENDIX G-6

## Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.



## Planned Projects:

(Post Mile, Description, Designation)

1-PM 30.760; Construct new 2.4 lane expressway bypass from Wards Ferry Rd. to Ferretti Rd. - Groveland; TBD

## Segment Location:

Wards Ferry/Big Oaks Rd. to Ferretti Rd. in Groveland

Post Mile: PM 30.32-32.55

Length: 2.23 Miles

Rural/Urban/Urbanized: No

Within City Limits: No

Local Planning Jurisdiction: Tuolumne County Transportation Commission

## Roadbed Information

Number of Lanes: Two-Lane

Terraform: Rolling

Right of Way Width: 40-88 Feet

Shoulder Width: 0 Feet

Median Width: 0 Feet

Lane Width: 11-12 Feet

Trucking Network: Terminal Access (STAA)

Functional Classification: Other Principal Arterial

Facility Type: Conventional

Interregional Road System: Yes

High Emphasis Route: Yes

Focus Route: No

Freeway Agreement: 10-TUO-120 No Number

6/24/1964 PM 29.26-35.18

National Highway System: Yes

Degree of Impact

Cultural Resources: N/A

Leaking Underground Tanks: Low

Possible Hazardous Waste: Low

Special Status Species: Low

\* See Appendix - for explanation of environmental status

Air Quality

Ozone

PM 10

Particulate Matter

2.5

Carbon Monoxide

Non-attainment - 8 hr. only

Attainment-Unclassified

Attainment-Unclassified

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

## Travel Forecast Data

Existing Facility: Two-Lane Conventional Highway

Base Free Flow Speed: 65

2007 Existing Facility

2015 without Improvement

2030 without Improvement

Level of Service: C

Volume/Capacity: 0.34

Average Daily Traffic: 6,600

Peak Hour Volume: 900

Peak Hour Directional Split: 60/40

Truck Volume % of Total Truck ADT: 3

Traffic Collision Rate (Average collision rates statewide for this type facility)

Actual Accident Rate

Statewide Average

Fatal &amp; Injury

Total (includes Property Damage)

3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/01/06 to 12/31/08

Concept Level of Service: C

Concept Facility (2030): Two-Lane Conventional

Ultimate Transportation Corridor: Two-Lane Conventional

Comments:

Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.

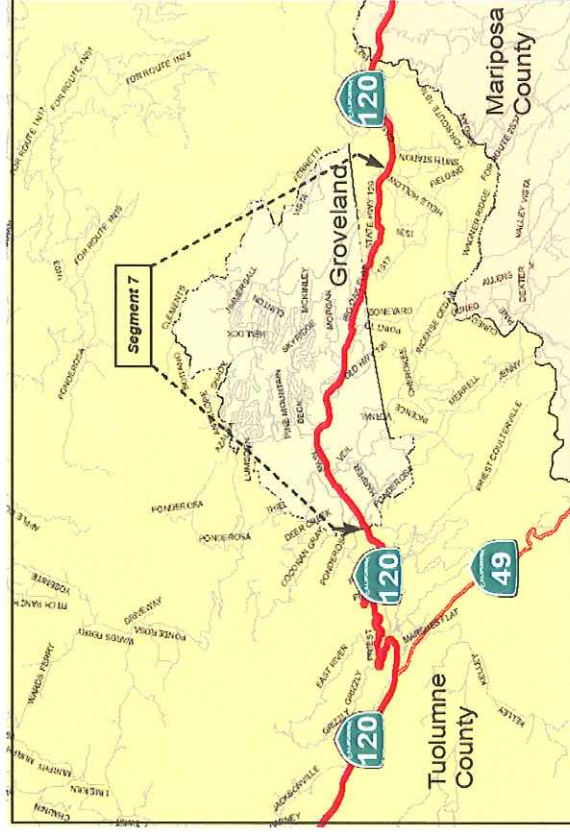
## STATE ROUTE 120 - TUOLUMNE COUNTY - SEGMENT 7

## APPENDIX G-7

## Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.



## Segment Location:

Description: Ferretti Rd. in Groveland to Hells Hollow Rd.

Post Mile: PM 32.55-R38.90

Length: 6.35 Miles

Functional Classification: Other Principal Arterial

Rural/Urban/Urbanized: Rural

Within City Limits: No

Local Planning Jurisdiction: Tuolumne County Transportation Commission

Roadbed Information

Number of Lanes: Two-Lane

Terrain: Rolling

Right of Way Width: 11-12 Feet

Shoulder Width: 0-8 Feet

Accessible to Bicycles: Yes

Median Width: 0 Feet

Truck Volume % of Total Truck ADT: 4

Level of Service: D

Volume/Capacity: 0.43

Average Daily Traffic: 4,600

Peak Hour Volume: 1,200

Peak Hour Directional Split: 60/40

Truck Volume % of Total Truck ADT: 4

Level of Service: D

Volume/Capacity: 0.43

Average Daily Traffic: 4,600

Peak Hour Volume: 1,200

Peak Hour Directional Split: 60/40

Truck Volume % of Total Truck ADT: 4

Level of Service: D

Volume/Capacity: 0.43

Average Daily Traffic: 4,600

Peak Hour Volume: 1,200

Peak Hour Directional Split: 60/40

Truck Volume % of Total Truck ADT: 4

Level of Service: D

## Travel Forecast Data

Existing Facility: Two-Lane Conventional Highway

Base Free Flow Speed: 65

	2007 Existing Facility	2015 without Improvement	2030 without Improvement
Level of Service:	D	D	E
Volume/Capacity:	0.43	0.5	0.61
Average Daily Traffic:	4,600	5,300	6,700
Peak Hour Volume:	1,200	1,400	1,700
Peak Hour Directional Split:	60/40		
Truck Volume % of Total Truck ADT:	4		

## Traffic Collision Rate (Average collision rates statewide for this type facility)

Actual Accident Rate	Rate	Statewide Average	Rate
Fatal & Injury	0.25	Fatal & Injury	0.77
Total (Includes Property Damage)	0.29	Total (Includes Property Damage)	1.54

3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/01/06 to 12/31/08

## Segment Route Concept

Concept Level of Service:	C
Concept Facility (2030):	Two-Lane Conventional
Ultimate Transportation Corridor:	Two-Lane Conventional

## Comments:

Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.

## Air Quality

Ozone	PM 10	2.5	Carbon Monoxide
Non-attainment - 8 hr. only	Attainment-Unclassified	Attainment-Unclassified	Attainment-Unclassified

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.









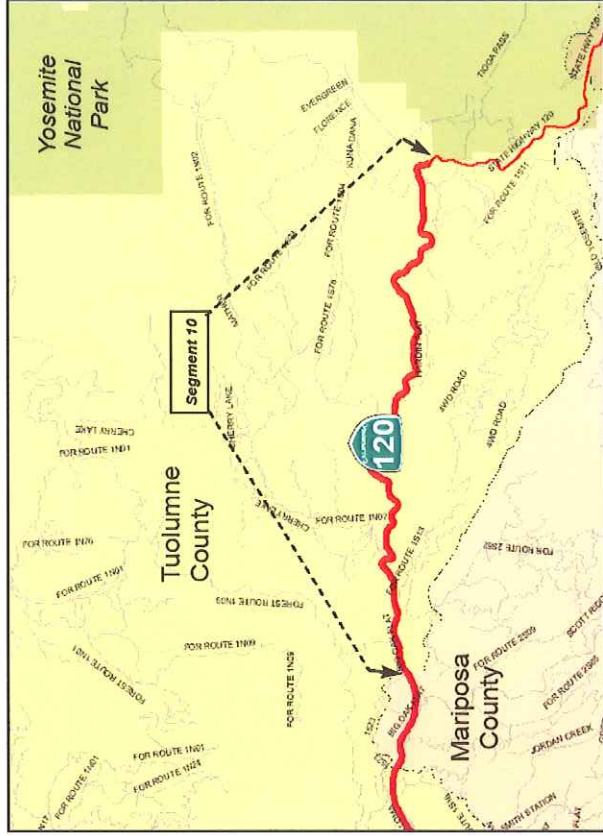
## STATE ROUTE 120 - TUOLUMNE COUNTY - SEGMENT 10

## APPENDIX G-10

## Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.



## Planned Projects:

(Post Mile, Description, Designation)

There are no planned projects in this segment at this time.

## Segment Location:

Description:	Mariposa County Line to Yosemite National Park
Post Mile:	PM R43.75-R56.51
Length:	12.76 Miles
Functional Classification:	Other Principal Arterial
Number of Lanes:	Two-Lane
Terrain:	Rolling
Accessible to Bicycles:	Yes
Right of Way Width:	100-500 Feet
Shoulder Width:	2-6 Feet
Median Width:	0 Feet
Local Planning Jurisdiction:	Tuolumne County Transportation Commission
Within City Limits:	No
Rural/Urban/Unincorporated:	Rural

## Roadbed Information

Number of Lanes:	Two-Lane
Terrain:	Rolling
Accessible to Bicycles:	Yes
Right of Way Width:	100-500 Feet
Shoulder Width:	2-6 Feet
Median Width:	0 Feet

## Route Designations

Functional Classification:	Other Principal Arterial
Facility Type:	Expressway
Interregional Road System:	Yes
High Emphasis Route:	Yes
Focus Route:	No
Freeway Agreement:	10-TUO-120 No Number
	6/27/1972; PM 43.7-56.6
Trucking Network:	Terminal Access (STAA)
National Highway System:	Yes

## Environmental Status

Flood Plains:	N/A
Wetlands:	High
Special Status Species:	High
Degree of Impact:	High
Cultural Resources:	High
Leaking Underground Tanks:	Low
Possible Hazardous Waste:	Low

\* See Appendix -- for explanation of environmental status

## Air Quality

Ozone	PM 10	2.5	Carbon Monoxide
Non-attainment - 8 hr. only	Attainment-Unclassified	Attainment-Unclassified	Attainment-Unclassified

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

## Travel Forecast Data

Existing Facility:	Two-Lane Expressway
Base Free Flow Speed:	65
Level of Service:	C
Volume/Capacity:	0.35
Average Daily Traffic:	3,500
Peak Hour Volume:	1,000
Peak Hour Directional Split:	60/40
Truck Volume % of Total Truck ADT:	3
2007 Existing Facility	without Improvement
2015 without Improvement	without Improvement
2030 without Improvement	without Improvement

## Traffic Collision Rate (Average collision rates statewide for this type facility)

Actual Accident Rate	Rate	Statewide Average	Rate
Fatal & Injury	0.26	Fatal & Injury	0.42
Total (Includes Property Damage)	0.64	Total (Includes Property Damage)	0.95

3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 1/01/06 to 12/31/08

## Segment Route Concept

Concept Level of Service:	C
Concept Facility (2030):	Two-Lane Conventional
Ultimate Transportation Corridor:	Two-Lane Conventional
Comments:	

Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.

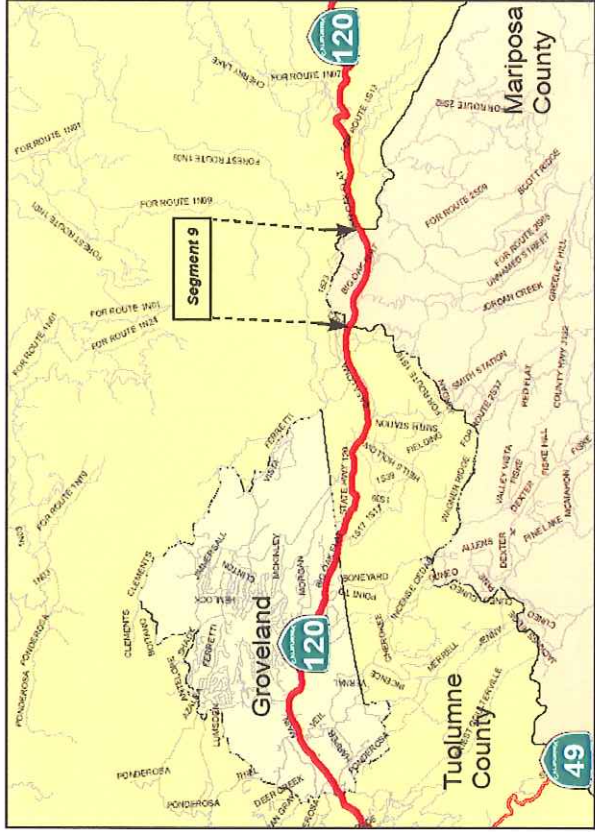
STATE ROUTE 120 - MARIPOSA COUNTY - SEGMENT 1 (Segment 9)

APPENDIX H-1

Programmed Projects:

(Post Mile, Description, Designation)

There are no programmed projects in this segment at this time.



Planned Projects:

(Post Mile, Description, Designation)

There are no planned projects in this segment at this time.

Segment Location:

Description: Tuolumne County Line to Tuolumne County Line

Post Mile: PM R41.52-R43.75

Length: 2.23 Miles

Functional Classification: Other Principal Arterial

Rural/Urban/Urbanized: Rural

Within City Limits: No

Local Planning Jurisdiction: Tuolumne County Transportation Commission

Roadbed Information

Number of Lanes: Two-Lane

Lane Width: 12 Feet

Terrain: Rolling

Right of Way Width: 160-500 Feet

Shoulder Width: 4-8 Feet

Accessible to Bicycles: Yes

Median Width: 0 Feet

Route Designations

Functional Classification: Other Principal Arterial

Facility Type: Expressway

Interregional Road System: Yes

High Emphasis Route: Yes

Focus Route: No

Freeway Agreement: 10-MPA-120-No. 4

12/15/1966 PM 41.58-43.75

Environmental Status

Flood Plains: N/A

Wetlands: Moderate

Special Status Species: Moderate

\* See Appendix - for explanation of environmental status

Air Quality

Ozone: PM 10

Particulate Matter: 2.5

Carbon Monoxide: Attainment-Unclassified

Non-attainment - 8 hr. only: Attainment-Unclassified

\* NOTE: This information is for overview purposes only and does not replace a full report from Right of Way, Environmental, or any other Branch or Division.

Travel Forecast Data

Existing Facility: Two Lane Expressway

Base Free Flow Speed: 60

2007 Existing Facility

2015 without Improvement

2030 without Improvement

Level of Service: D

Volume/Capacity: 0.39

Average Daily Traffic: 3,700

Peak Hour Volume: 1,100

Peak Hour Directional Split: 60/40

Truck Volume % of Total Truck ADT: 4

Traffic Collision Rate (Average collision rates statewide for this type facility)

Actual Accident Rate

Fatal & Injury

Total (Includes Property Damage)

Statewide Average

Fatal & Injury

Total (Includes Property Damage)

Rate

1.03

2.04

Segment Route Concept

3-Year Period Evaluated Rates - Rates are incidents per million vehicle miles from 7/01/05 to 6/30/08

Concept Level of Service: C

Concept Facility (2030): Two-Lane Conventional

Ultimate Transportation Corridor: Two-Lane Conventional

Comments:

Due to environmental, right of way and financial constraints, special emphasis should be placed on identifying operational improvements such as left turn lanes, intersection improvements, wider shoulders, passing lanes, turn outs.





## **System Planning and Goods Movement**

*"We're here to get you there."*

1976 E. Martin Luther King Jr. Blvd., Stockton, CA 95205

Phone 209-948-7325 Fax 209-948-7164

Lynn\_O'Connor@dot.ca.gov

### **CONTACT INFORMATION:**

LYNN O'CONNOR, SENIOR TRANSPORTATION PLANNER  
OFFICE OF SYSTEMS PLANNING AND GOODS MOVEMENT  
CALTRANS, DISTRICT 10